

BLOOMSBURG UNIVERSITY

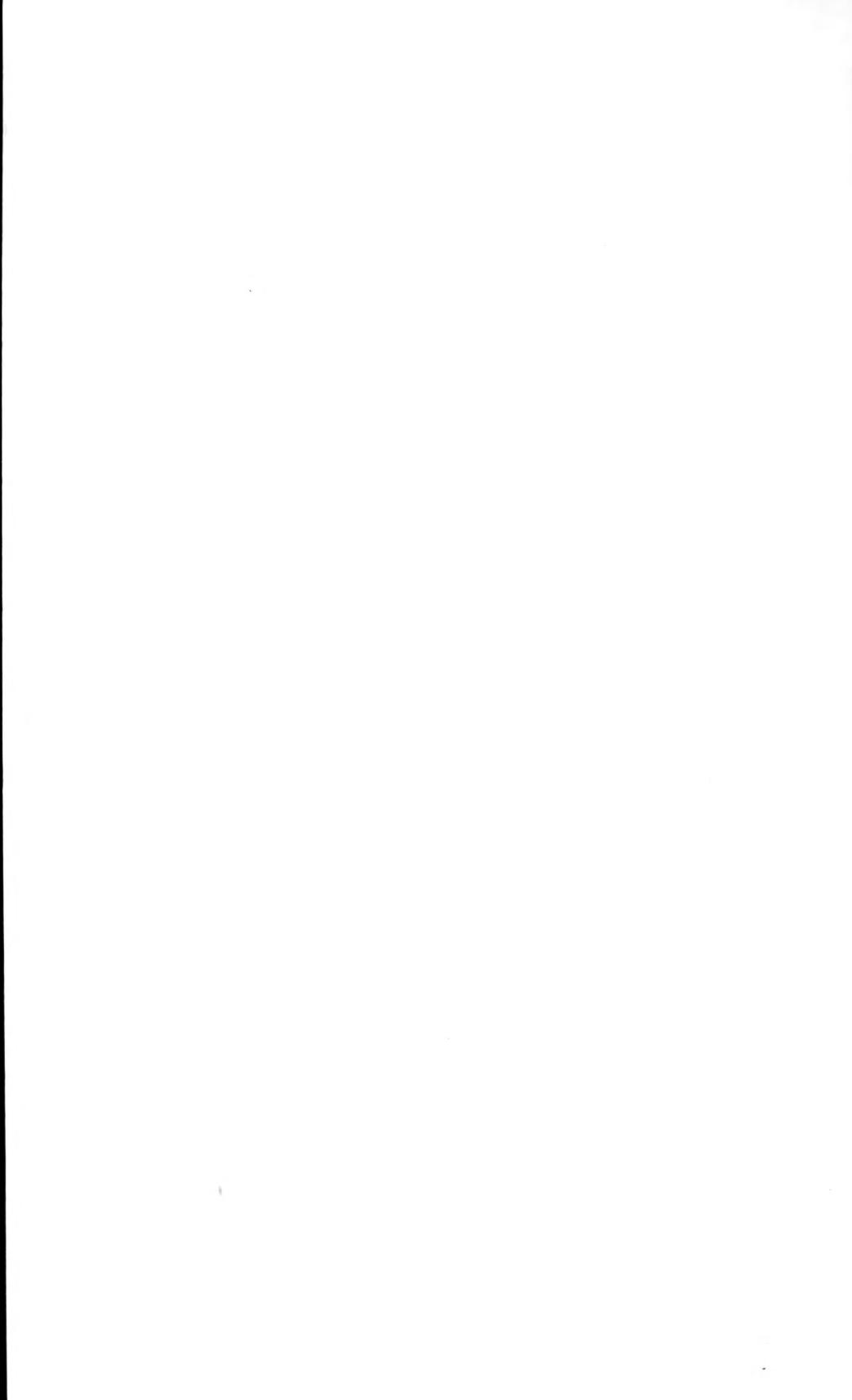
BLOOMSBURG
Undergraduate
Catalog

1995-1997

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PENNSYLVANIA • KISSLER



Bloomsburg UNIVERSITY

*A Member of Pennsylvania's
State System of Higher Education*

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The Undergraduate Catalog, 1995-1997

Notice

The provisions of this catalog are not to be regarded as an irrevocable contract between the university and the student. Bloomsburg University reserves the right to amend any academic, administrative, or disciplinary policy or regulation (or fee) described in this catalog without prior notice to persons affected.

Requirements for graduation as well as curricula for degree programs, such as those requiring professional certification/licensure, may change throughout the student's matriculation. Such changes will not be retroactively required; however, the student will have the option to choose the new program or requirement, if desired.

Exceptions may be necessary when changes in professional certification or licensure standards mandate changes in academic requirements or in university programs.

Accreditation

Bloomsburg University is accredited by the Middle States Association of Colleges and Schools; the National Council for the Accreditation of Teacher Education; the National League for Nursing; the Council on Education of the Deaf; and the Council on Social Work Education. Programs of study have also been approved by the Pennsylvania State Board of Education and the State Board of Nursing. In addition, the bachelor of science program in chemistry offered by the Department of Chemistry is approved by the American Chemical Society.

Affirmative Action

Bloomsburg University is committed to providing equal educational opportunities for all persons without regard to race, color, religion, sex, age, national origin, ancestry, lifestyle, sexual orientation, disability, Vietnam era status as veteran, or union membership. The university is additionally committed to affirmative action and will take positive steps to provide such educational and employment opportunities. Inquiries may be referred to: Director of Social Equity, Carver Hall, Bloomsburg University, Bloomsburg, PA 17815.

Access to Educational Records

In accordance with the Family Educational Rights and Privacy Act, commonly known as the Buckley Amendment, students are provided with privacy safeguards of their educational records. The university, therefore, issues reports of progress including grades, written evaluations and letters of warning, directly to the student. A student may have access to all information pertaining to his or her educational records and academic status.

Parents may have access to information pertaining to their son's or daughter's educational records and academic status without prior written consent of their son or daughter if he or she is a dependent as defined under Section 152 of the IRS Code of 1954. If the student is not a dependent, as defined by the IRS Code, then the university must receive prior written consent from the student in order to release such information to his or her parents.

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Academic Calendars

Fall 1995

Electronic Registration	Aug. 22 to Aug 28, 2 p.m.
Classes Begin	Monday, Aug. 28, 8 a.m.
Labor Day — No Classes	Monday, Sept. 4
Mid-Term	Thursday, Oct. 10, 10 p.m.
Mid-Term Reading Day — No Classes	Friday, Oct. 13
Thanksgiving Recess Begins	Wednesday, Nov. 22, 2 p.m.
Classes Resume	Monday, Nov. 27., 8 a.m.
Classes End	Saturday, Dec. 9
Reading Day	Sunday, Dec. 10
Finals Begin	Monday, Dec. 11
Finals End	Saturday, Dec. 16
Commencement	Saturday, Dec. 16

Spring 1996

Electronic Registration	Jan. 9 to Jan 15, 2 p.m.
Classes Begin	Monday, Jan 16, 8 a.m.
Martin Luther King Day — No Classes	Monday, Jan. 15
Monday Classes Meet	Friday, Jan 19 (No Evening Classes)
Mid-Term	Tuesday, March 5, 10 p.m.
Spring Break Begins	Saturday, March 9, 10 p.m.
Classes Resume	Monday, March 18, 8 a.m.
Spring Weekend Begins	Thursday, April 4. 10 p.m.
Classes Resume	Monday, April 8, 6 p.m.
Classes End	Saturday, May 4
Reading Day	Sunday, May 5
Finals Begin	Monday, May 6
Finals End	Saturday, May 11
Commencement	Saturday, May 11

Fall 1996

Electronic Registration	Aug 19 to Aug 26, 2 p.m.
Classes Begin	Monday, Aug. 26, 8 a.m.
Labor Day — No Classes	Monday, Sept. 2
Mid-Term	Thursday, Oct. 15, 10 p.m.
Mid-Term Reading Day — No Classes	Friday, Oct. 18
Thanksgiving Recess Begins	Wednesday, Nov. 27, 2 p.m.
Classes Resume	Monday, Dec. 2., 8 a.m.
Classes End	Saturday, Dec. 7
Reading Day	Sunday, Dec. 8
Finals Begin	Monday, Dec. 9
Finals End	Saturday, Dec. 14
Commencement	Saturday, Dec. 14

Spring 1997

Electronic Registration	Jan. 6 to Jan 13, 2 p.m.
Classes Begin	Monday, Jan 13, 8 a.m.
Martin Luther King Day — No Classes	Monday, Jan. 20
Monday Classes Meet	Friday, Jan 24 (No Evening Classes)
Mid-Term	Tuesday, March 6, 10 p.m.
Spring Break Begins	Saturday, March 8, 10 p.m.
Classes Resume	Monday, March 17, 8 a.m.
Spring Weekend Begins	Thursday, March 27. 10 p.m.
Classes Resume	Monday, March 31, 6 p.m.
Classes End	Saturday, May 3
Reading Day	Sunday, May 4
Finals Begin	Monday, May 5
Finals End	Saturday, May 10
Commencement	Saturday, May 10

For Information

Dial 389 plus the extension number from off-campus telephones. On campus, use the four-digit extension. For offices not listed, off campus call the university switchboard, (717) 389-4000, on campus, call "0," 8 a.m. to 4:30 p.m.

Academic Advisement	12 Ben Franklin Hall	4271
Academic Affairs	Office of the Provost	
	115 Waller Administration Building	4308
Academic Support Services	Luzerne Residence Hall	4199
ACT 101/EO Programs	14 Waller Administration Building	4492
Administration	Office of the Vice President for Administration	
	15 Waller Administration Building	4115
Admissions Office	10 Ben Franklin Hall	4316
Affirmative Action	Carver Hall	4528
Alumni Affairs	Alumni House	4058
Arts and Sciences,	Office of the Dean	
College of	106 Waller Administration Building	4410
Athletics Office	Nelson Field House	4050
Business, College of	Office of the Dean, 221 Sutliff Hall	4019
Business Office	22 Waller Administration Building	4013/4407
Campus Child Center	Elwell Residence Hall	4547
Career Development Center	Kehr Union	4070
Community Activities	Kehr Union	4462
Cooperative Education-		
Academic Internships	15 Ben Franklin Hall	4678
Counseling/Human Dev.	17 Ben Franklin Hall	4255
Curriculum Materials Ctr.	McCormick Center for Human Services	4035
Development Office	Carver Hall	4128
Extended Programs,	Office of the Dean	
School of	Magee Center, 700 West Main Street	4420
Financial Aid Office	19 Ben Franklin Hall	4279/4297
Graduate Studies	Office of the Assistant Vice President for Graduate Studies	
School of	109 Waller Administration Building	4015
Health Center	Kehr Union	4451/4452
Honors/Scholars Program	7 Bakeless Center for the Humanities	4713
Information Desk	Kehr Union	3900
International Education	Lower Level, Luzerne Residence Hall	4830
Library, Andruss	General Information	4204
Ministries	Catholic (784-3123); Protestant (784-0703)	
Orientation Office	16 Ben Franklin Hall	4595
Police, University	Basement of University Store	4168
President's Office	Carver Hall	4526
Professional Studies,	Office of the Dean	
College of	3105 McCormick Human Services Center	4005
Registrar's Office	6 Ben Franklin Hall	4263
Residence Life Office	Elwell Residence Hall	4089
Student Activities	Kehr Union	4346
Student Life Office	Office of the Vice President for Student Life	
	11 Ben Franklin Hall	4065
University Advancement	Office of Vice President for University Advancement	
	Carver Hall	4524
University Relations	104 Waller Administration Building	4411/4412

Emergency Telephone Numbers

Ambulance	784-7911
BeSAFe Hotline	Information on safety and security issues on campus	2723
Bloomsburg Hospital Emergency Service	387-2111
Emergencies on Campus	University Police Emergency Number	4911
Fire	Bloomsburg Fire Department	784-7911
Geisinger Medical Center	271-6591
Emergency Department	
Information, Referral, Active Listening and Crisis Intervention, call TAP-Line	1-800-222-9016

Bloomsburg University

General Mailing Address: Bloomsburg University
 400 E. Second Street
 Bloomsburg, PA 17815-1301

Internet Address: <http://www.bloomu.edu>

A faint, circular watermark of the Commonwealth of Pennsylvania's seal is visible in the background. The seal features a central shield with a plow, a sheaf of wheat, and a star, surrounded by a border with the words "THE GREAT SEAL OF THE COMMONWEALTH OF PENNSYLVANIA".

General Information

Bloomsburg University

A Member of Pennsylvania's State System of Higher Education

Bloomsburg University of Pennsylvania is one of the 14 state-owned universities that compose the State System of Higher Education. In addition to 64 undergraduate degree programs and one associate degree program, Bloomsburg offers 18 master's degrees in select academic disciplines and a doctoral program in elementary education in cooperation with Indiana University of Pennsylvania.

Bloomsburg University, which offers curricula in liberal arts, business, nursing, allied health sciences, and teacher education, has more than 7,500 students. The university is organized as three colleges (Arts and Sciences, Business, and Professional Studies) and two schools (Graduate Studies and Extended Programs). The scope and internal structure of each college is described in the succeeding chapter of this catalog.

The home of Bloomsburg University is its namesake, the Town of Bloomsburg, the county seat of Columbia County, Pa. The industrial, trading, and residential community of nearly 12,000 is located 80 miles northeast of Harrisburg and is within two miles of two interchanges off Interstate 80.

Bloomsburg is served by Greyhound and Continental Trailways bus lines. Commercial airports in the Scranton/Wilkes-Barre area and in Williamsport are approximately an hour's drive from the university.

History

An academy "to teach youth the elements of a classical education" was established in Bloomsburg in 1839. The academy continued with varied fortunes until 1856 when a charter was prepared and stock issued to reorganize it as the Bloomsburg Literary Institute. Institute Hall, later renamed Carver Hall after Henry Carver, an early principal, architect, and teacher, was erected in 1867. Today, the gold-domed, red-brick building is the university's landmark.

Largely through the efforts of J. P. Wickerham, superintendent of public instruction, the Bloomsburg Literary Institute officially became the Bloomsburg Literary Institute and State Normal School in 1869; it continued under this name and organization until 1916 when it was purchased by the Commonwealth of Pennsylvania and named Bloomsburg State Normal

School.

The emphasis at the Normal School changed during the early 1920s from secondary and college-preparatory courses for specialized teachers to full-time teacher education. In May 1927, the institutional name was changed to Bloomsburg State Teachers College, and the school was authorized to grant the Bachelor of Science in Education for teachers in elementary and secondary schools.

Under the administration of President Francis B. Haas (1927-1939), great progress was made in the teacher education program, and a new degree program in business education was initiated.

Upon the naming of Dr. Haas as state superintendent of public instruction, Dr. Harvey A. Andruss, then dean of instruction and a former director of the Business Education Department, was appointed president, a position he held until his retirement in 1969. During World War II, the U.S. Navy V-12 Officer Training Program was conducted on the Bloomsburg campus. As a result, a campus building was renamed Navy Hall. In 1957, a division of special education was instituted, and today, Navy Hall still houses that program.

Major expansion in facilities, faculty, and student body followed. Undergraduate full-time enrollment rose from 1,743 in 1960 to 6,184 undergraduates in 1992.

In 1960, the institution's name was changed to Bloomsburg State College. Authorization soon followed to grant baccalaureate degrees for liberal arts programs in humanities, social sciences, and natural sciences/mathematics. Graduate study, leading to the Master of Education, was inaugurated. In 1968, approval was received for the Master of Arts, in 1970 for the Master of Science, in 1976 for the Master of Business Administration, and in 1982 for the Master of Science in Nursing. A cooperative doctoral program in elementary education began in 1982.

Commonwealth legislation enacted on July 1, 1983, established the State System of Higher Education, and Bloomsburg State College became Bloomsburg University of Pennsylvania. Bloomsburg's president, Dr. James H. McCormick, became the system's interim chancellor and later its first permanent chancellor.

The following have served as presidents of Bloomsburg University:

Professor Henry Carver (1866-1871)
Charles B. Barkley (1871-1872)
The Rev. John Hewitt (1872-1873)
Dr. T. L. Griswold (1873-1877)
Dr. David J. Waller Jr. (1877-1890)
Dr. Judson P. Welsh (1890-1906)
Dr. David J. Waller Jr. (1906-1920)
Dr. Charles H. Fisher (1920-1923)
Dr. G. C. L. Reimer (1923-1927)
Dr. Francis B. Haas (1927-1939)
Dr. Harvey A. Andruss (1939-1969)
Dr. Robert J. Nossen (1969-1972)
Dr. Charles H. Carlson (1972-1973)
Dr. James H. McCormick (1973-1983)
Dr. Larry W. Jones (1983-1985)
Dr. Harry Ausprich (1985-1993)
Dr. Curtis R. English (1993-1994)
Dr. Jessica Sledge Kozloff (1994-)

Mission Statement

Bloomsburg University, as one of 14 institutions in the State System of Higher Education of the Commonwealth of Pennsylvania, embraces the general mission of the system to assure excellence in higher education at an affordable cost. The campus is accessible and attractive, located in the Town of Bloomsburg near the Susquehanna River and Interstate 80.

Bloomsburg is a coeducational institution serving students of diverse backgrounds from Pennsylvania, its surrounding states, and foreign countries. To its community and region, the university is an artistic and educational resource that serves a broad range of community needs in education, health care, business-related services, library resources, and cultural activities. It offers undergraduate programs as well as graduate programs in select areas of strength. There is an emphasis on a strong lib-

eral arts preparation. The university is committed to a program of affirmative action in order to provide equal educational opportunity to all persons.

It is a goal of the university to integrate academic programs, cultural activities, and interpersonal relations to promote intellectual growth and social responsibility among students. The university seeks to extend the academic environment from the classroom into other student activities. It strives to foster openness in communication and involvement in decision making through a participatory governance structure. In this atmosphere, faculty, administration, staff, and students attain a genuine respect for one another, a concern for the enrichment of their experience, and the achievement of their common purpose. The university community is committed to the principles of personal and academic freedom within the framework of ethical responsibilities.

By emphasizing the assimilation, synthesis, and integration of information, it is a goal of the university to develop in its students the characteristics of mental resourcefulness and responsible self-expression as well as the abilities to think critically, clarify values, and demonstrate problem-solving skills. While maintaining programs for which Bloomsburg has been traditionally recognized, such as those in business and education, the university has identified strategic directions that include programs in health-related fields; programs that promote student-faculty interaction in teaching, learning, and research; programs that emphasize regional, national, international, and environmental concerns; and programs that incorporate the application of technology into instruction.

Degree Programs

Bloomsburg University offers 64 programs of study in the Colleges of Arts and Sciences, Business, and Professional Studies. Listed below are the degrees offered, the programs of study, the college that supports the program, and code numbers for courses in the subject area.

<i>Degree</i>	<i>Program of Study</i>	<i>College</i>	<i>Code</i>
Bachelor of Arts			
	Anthropology	Arts and Sciences	46
	Art History	Arts and Sciences	31
	Art Studio	Arts and Sciences	32
	Biology	Arts and Sciences	50
	Chemistry	Arts and Sciences	52
	Economics	Arts and Sciences	40
	English	Arts and Sciences	20
	French	Arts and Sciences	10
	Geography	Arts and Sciences	41
	German	Arts and Sciences	11
	History	Arts and Sciences	42
	Humanities	Arts and Sciences	38
	Mass Communications	Arts and Sciences	27
	Mathematics	Arts and Sciences	53
	Music	Arts and Sciences	35
	Philosophy	Arts and Sciences	28
	Physics	Arts and Sciences	54
	Political Economics	Arts and Sciences	40
	Political Science	Arts and Sciences	44
	Psychology	Arts and Sciences	48
	Social Sciences	Arts and Sciences	47
	Social Welfare	Arts and Sciences	45
	Sociology	Arts and Sciences	45
	•Criminal Justice	Arts and Sciences	45
	Spanish	Arts and Sciences	12
	Speech	Arts and Sciences	25
	Theater Arts	Arts and Sciences	26
Bachelor of Science			
	Accounting	Business	91
	Adult Health	Arts and Sciences	05
	Biology	Arts and Sciences	50
	•Marine Science	Arts and Sciences	55
	Business Administration	Business	—
	•Accounting	Business	91
	•Business Economics	Business	40
	•Business Law	Business	98
	•Finance	Business	96
	•Management	Business	93
	•Management Information Systems	Business	92
	•Marketing	Business	97

<i>Degree</i>	<i>Program of Study</i>	<i>College</i>	<i>Code</i>
	Business Economics	Arts and Sciences	40
	Chemistry	Arts and Sciences	52
	Clinical Chemistry	Arts and Sciences	52
	Computer and Information Science	Arts and Sciences	56
	Computer and Information Science	Business	92
	Earth Science	Arts and Sciences	51
	Geology	Arts and Sciences	51
	Health Physics	Arts and Sciences	54
	Interpreting	Professional Studies	74
	Mathematics	Arts and Sciences	53
	Medical Technology	Professional Studies	86
	Natural Sciences and Mathematics	Arts and Sciences	59
	Physics	Arts and Sciences	54
	Radiologic Technology	Professional Studies	—
Bachelor of Science in Education			
	Business Education	Business	90
	Comprehensive Social Studies	Professional Studies	—
	Early Childhood Education	Professional Studies	62
	Elementary Education	Professional Studies	62
	Secondary Education	Professional Studies	65
	•Biology	Professional Studies	50
	•Chemistry	Professional Studies	52
	•Communication	Professional Studies	25
	•Earth Science	Professional Studies	51
	•English	Professional Studies	20
	•French	Professional Studies	10
	•Mathematics	Professional Studies	53
	•Physics	Professional Studies	54
	•Science Education	Professional Studies	—
	•Spanish	Professional Studies	12
	Special Education	Professional Studies	70
	Speech Pathology and Audiology	Professional Studies	72
Bachelor of Science in Nursing			
	Nursing	Professional Studies	82
Bachelor of Science in Office Administration			
	Office Administration	Business	—
	•Office Systems	Business	94
Associate of Science in Health Services			
	Health Services	Professional Studies	—

College of Arts and Sciences

Hsien-Tung Liu

Dean, College of Arts and Sciences

The College of Arts and Sciences includes curricula in 19 departments with the expressed intention of providing a quality liberal arts education. These curricula encourage broad exposure to knowledge, ideas, and intellectual process. The liberal arts philosophy places strong emphasis on cultural and scientific knowledge, and on essential skills such as reading, writing, quantitative and critical analysis absolutely necessary for the preparation for any particular high profession. Degree programs lead to a Bachelor of Science or a Bachelor of Arts, or both.

Bloomsburg University was first authorized to offer the Bachelor of Arts in 1960 and the Bachelor of Science in 1963. Today, the college comprises about a third of the students and two thirds of the faculty at Bloomsburg University. All General Education courses — a certain number of these courses are required of all students seeking a baccalaureate degree — are offered through Arts and Sciences.

The Bachelor of Arts offers the student the opportunity for a liberal education through study in the humanities, the social sciences, and the natural sciences and mathematics. The Bachelor of Arts is for majors in the academic disciplines of arts, humanities and social sciences. The Bachelor of Science provides the opportunity for a liberal education together with a specialization in a number of fields in the natural sciences. Liberal arts graduates are prepared for a wide range of future goals. Students who are undeclared or undecided about an academic major are encouraged to enroll in Arts and Sciences curricula. There are interdisciplinary studies or broad area programs.

Degree Programs

All students must complete the General Education requirements described in the *General Education Requirements* section. Each student selects a major and fulfills the major requirements as stated at the beginning of the course descriptions for each of the 19 departments in Arts and Sciences. Several programs have more than one option for fulfilling the major requirements.

Academic Minors

In addition to achieving an in-depth understanding of an academic discipline by completing the requirements of a major, students may

gain knowledge in a second area by completing the minor requirements of that discipline. Each academic minor consists of a minimum of 18 semester hours of courses. The following disciplines offer academic minors: anthropology, art studio, art history, biology, computer science, economics, English, French, geography, history, mathematics, music, philosophy, physics, political science, psychology, sociology, and Spanish. Consult the area of interest in the catalog for course requirements.

Arts and Sciences Honors Program

The College of Arts and Sciences provides superior students an opportunity to participate in an honors program during their junior and senior years. A student selected for this program participates in an honors seminar in the humanities, natural sciences and mathematics or social sciences, and prepares an honors thesis. The thesis is developed under the direction of a faculty member from the academic department that sponsors the student. Eligibility is limited to students with a minimum QPA of 3.5 for coursework in the freshman and sophomore years. Students interested in this program should contact their faculty adviser.

Preprofessional and Career Advisement

Preprofessional and Career Advisement Committees offer special supplementary advisement to students. Members of these committees help students learn about admission requirements of professional schools or careers and select college courses in harmony with these requirements.

Students interested in preprofessional or career advising should indicate this interest on the admission application to the university so that appropriate advisers may be notified.

As a rule, professional schools for dentistry, medicine, optometry, pharmacy, podiatry, and veterinary medicine do not specify an undergraduate major, but they do specify minimum essential courses, especially in the sciences and mathematics. These minimum requirements usually include courses in general chemistry, organic chemistry, mathematics, biology, and physics. High standards of undergraduate scholarship must be achieved if a student wishes to compete for admission to a professional school. More than 85 percent of Bloomsburg University's graduates who apply to medical

and dental schools are accepted. Students anticipating these careers should contact the Department of Biological and Allied Health Sciences which provides faculty coordinators for preprofessional advisement.

Pre-Law

Students who intend to enter the legal profession need to be cognizant of the variations in entrance requirements for law schools. The Pre-Law Advisory Committee counsels students on course selection. Most law schools will consider applications from students with diverse majors, emphasizing the value of a thoroughly cultivated mind rather than a specific body of knowledge. Students interested in a law career or pre-law advisement should contact Professor George Agbango in the Department of Political Science in the College of Arts and Sciences or Professor Bruce Rockwood in the Department of Finance and Business Law in the College of Business.

Career Concentrations

The College of Arts and Sciences provides multi-disciplinary opportunities for students to pursue a specialization in several career-oriented programs. Through a series of courses, usually in process and content areas, a student gains the foundation knowledge for later placement in vocational settings. The career concentration is intended as a specialty area in addition to the liberal arts major. These concentrations are not regarded as substitutes for an academic major, though course overlap exists for many programs. Career concentrations exist in 10 areas. Students may contact the following faculty members for details.

Audio Recording Techniques — Stephen C. Wallace, Department of Music

Community Recreation Leader — Susan J. Hibbs, Department of Health, Physical Education, and Athletics

Community Services — Charles Lauder-milch, Department of Sociology and Social Welfare

Environmental Planning — Brian A. Johnson, Department of Geography and Earth Science

Family, Children, and Youth — Dale L. Sultzbaugh, Department of Sociology and Social Welfare

Gerontology — Chang Shub Roh, Department of Sociology and Social Welfare

International Business — Francis J. Gallagher, Departments of Marketing and Management

Organizational Relations — Jim H. Huber, Department of Sociology and Social Welfare

Outdoor Leadership and Management — Jim H. Dalton Jr., Department of Psychology

Public Administration — George Agbango, Department of Political Science

Independent Study

Independent study provides an opportunity for the advanced student to pursue in-depth individualized study in a topic of special value or interest to the student. A limited number of independent study offerings are available each semester. Students interested in applying for independent study should develop a written proposal with their faculty sponsor. The proposed number of semester hours should be indicated in the proposal. The independent study proposal, along with the name of the faculty sponsor, is submitted to the appropriate department for recommendation, then to the dean for final approval.

Academic Departments

The College of Arts and Sciences is comprised of 19 academic departments. Chairpersons are selected on a three-year cycle and departments with more than 15 faculty members also name an assistant chairperson. During summer sessions, a faculty member is designated as the summer chair. While most departments enjoy full-time secretarial support, some departments share clerical staff and rely on part-time and student help. The academic departments in arts and sciences include:

Department of Anthropology

Department of Art

Department of Biological and Allied Health Sciences

Department of Chemistry

Department of Communication Studies

Department of Economics

Department of English

Department of Geography and Earth Science

Department of Health, Physical Education, and Athletics

Department of History

Department of Languages and Cultures

Department of Mass Communications

Department of Mathematics and Computer Science

Department of Music

Department of Philosophy

Department of Physics

Department of Political Science

Department of Psychology

Department of Sociology and Social Welfare

College of Business

Gene R. Remoff
Interim Dean, College of Business

The College of Business offers undergraduate and graduate programs in business administration and business education. The college is pursuing accreditation by the American Assembly of Collegiate Schools of Business.

The primary objective of the college is teaching. Information technology is a major component of instruction, as well as developing critical thinking and analysis skills of students. Moreover, research and other intellectual contributions are highly valued. Members of the faculty serve as consultants and educators in both the public and private sectors.

Students enrolled in other colleges within the university who wish to transfer to a business curriculum must have completed a minimum of 15 semester hours at Bloomsburg to be eligible for consideration. In addition, a minor in business administration is available to students in other colleges.

Technology Emphasis

The college is committed to the incorporation of technology into the curriculum. Each full-time faculty member's office has an appropriate microcomputer. Two common access microcomputer laboratories are in operation in Sutliff Hall and are subject to recurring update and renovation.

A local area network interconnects faculty and administrative offices, classrooms, and laboratories and links to other computer facilities on campus. Through the State System of Higher Education Network, faculty, students and staff have access to the Internet linking them to local, regional, national, and international networks.

Uniform software standards (word processing, database, and spreadsheets), multi-media, and decision support software are maintained.

Business Honors Program

The College of Business provides superior students an opportunity to participate in an honors program during their junior and senior years. Eligibility is limited to students with a minimum QPA of 3.40 for coursework in the freshman and sophomore years in their business courses (core, major, and business electives) or a 3.50 QPA overall if their QPA in their business courses is between 3.25 and 3.40.

Career Concentration

The College of Business offers a career concentration in International Business. This concentration provides students with the necessary skills and knowledge to operate in a global economy. The concentration includes a core of international business administration courses, accompanied by interdisciplinary courses with an international emphasis. A language proficiency is a requirement of the concentration.

Academic Departments

The College of Business is composed of six academic departments:

Department of Accounting

Department of Business Education and Office Administration

Department of Computer and Information Systems

Department of Finance and Business Law

Department of Management

Department of Marketing

Programs and Specialization

Business Administration

Bachelor of Science in Business Administration

Specializations in: Accounting, Business Economics, Finance, Management Information Systems, Management and Marketing.

Business Education

Bachelor of Science in Education

Certification in: Accounting, Data Processing, Marketing and Office Technologies
(Required for all majors)

Computer and Information Systems

Bachelor of Science in Computer and Information Science

Office Systems

Bachelor of Science in Office Administration

Institute for Comparative and International Management Studies

The Institute for Comparative and International Management Studies (ICIMS) was established at Bloomsburg to fulfill the university's mission and goals through sponsorship and

initiation of activities aimed at increased understanding of cross-cultural and comparative management issues. The institute initiates, coordinates, and administers joint degree programs with overseas universities in business administration; sponsors management research projects within the United States and at overseas sites; provides consulting services and workshops in all areas of management; and develops and administers quality executive development and training programs as required by a particular country.

ICIMS, with offices in Sutliff Hall, seeks to provide educational and internship opportunities in many European and Asian countries,

such as the United Kingdom, France, the Netherlands, Taiwan, and China.

In addition to exchange programs, ICIMS hosts international conferences, and serves as a regional resource center for area businesses. For more information, contact the institute's office at (717) 389-4913/4770.

International Exchange Program

Students in the College of Business have an opportunity to study overseas in Europe. There are exchange sites at business schools in the Netherlands, England and Denmark. Eligible students must have junior standing and a 2.5 QPA.

College of Professional Studies

Howard K. Macauley
Dean, College of Professional Studies

School of Education

Programs are offered for preparation of teachers for early childhood centers and elementary schools, academic subjects in secondary schools, special education, communication disorders, and business education.

The teacher education program at Bloomsburg University is committed to improving the field of education through a comprehensive program which recognizes its unique contribution to society, both as a reflection of that society and as an agent for the improvement of society. To meet this obligation, the programs draw upon the knowledge and understanding of general as well as professional education. It strives for a blend in preparing a person to fulfill a role in society as an informed, inquiring, and skilled professional.

More specifically, the teacher education programs provide:

- The basic academic preparation for persons to acquire a depth and breadth of knowledge in both general and specialized studies;
- Basic training to insure mastery of the specific skills necessary for competent functioning as a professional;
- An opportunity for further enrichment within the individual's area of professional competence through a regular program of speakers, seminars, and related activities;

- Human and physical resources necessary to assist in the educational development and growth of the community served by the university; and
- The means for advancement of knowledge through research in specific areas of education.

Bloomsburg University is committed to the preparation of teachers of the highest quality. In pursuit of that goal, the School of Education subscribes to and endorses the philosophic statement as developed by the American Association of Colleges for Teacher Education as a guide to the development and operation of all of its teacher education programs.

Generic Role Competencies

The teacher education faculty believe that for successful teaching to occur, the teacher must perform effectively in a number of different roles. The teacher also must command functional knowledge in appropriate content area(s) as well as in cognate disciplines with direct or related significance for the act of teaching.

Six generic role competencies and 15 related cognate strands have been identified as central to the preparation of candidates in teacher education programs at Bloomsburg University.

Role Competencies

- Assessing and Diagnosing
 - Documenting and Evaluating
 - Instructing
 - Communicating and Interacting
 - Managing
 - Planning
- Cognate Strands**

Curriculum Theory
Educational Research
Educational Anthropology
Educational Sociology
Educational History
Educational Technology
Educational Law
Group Dynamics
Educational Measurement and Evaluation
Human Development and Exceptionality
Educational Organization and Administration
Instructional Theory
Knowledge in one or more content areas
Educational Philosophy
Educational Psychology

Accreditation of Teacher Education

Bloomsburg is accredited by the National Council for the Accreditation of Teacher Education (NCATE) and the Council on Education of the Deaf. The teacher education programs outlined in this catalog have been approved for teacher certification by the Pennsylvania Department of Education. The Speech, Hearing, and Language Clinic is certified by the Professional Services Board of the American Speech, Hearing, and Language Association.

Teacher Certification

The completion of one of the approved programs in teacher education is prerequisite to institutional recommendation for a teacher's certificate. Upon recommendation, an initial certificate is granted by the Commonwealth of Pennsylvania. The appeal procedure for considering the problems of certification candidates can be found in the section of the catalog dealing with academic grievances.

As of June 1987, all individuals seeking teacher certification in Pennsylvania are required to pass state mandated tests at levels determined by the Secretary of Education. The tests assess basic skills, general knowledge, knowledge of subjects in which certification is sought, and professional knowledge.

An initial certificate is designated as Instructional Level I. It is valid for six years. A Level I certificate is not subject to renewal beyond a total of six years after the individual begins teaching. A permanent Level II certificate is issued upon completion of three years of successful teaching and experience under a Level I certificate and the completion of a minimum of 24 semester hours of postbaccalaureate coursework.

Programs offered for Level I certification are:

- Early Childhood Education* (Preschool through Grade 3)
- Elementary Education* (Kindergarten through Grade 6)
- Business Education* (accounting, data processing, marketing)
- Secondary Education* (biology, chemistry, communication, earth science, English, French, Spanish, general science, mathematics, physics, comprehensive social studies)
- Special Education* (mentally and/or physically handicapped)
- Communication Disorders* (speech correction or hearing impaired)

Interstate Certificate Agreements

Pennsylvania cooperates in several interstate agreements that stipulate that holders of Pennsylvania Instructional Certificates are eligible, subject to special provisions, for reciprocal credentials in other states. Participating states currently include: Alabama, California, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Idaho, Indiana, Kentucky, Maryland, Massachusetts, Michigan, Montana, New Hampshire, New Jersey, New York, North Carolina, Ohio, Puerto Rico, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Virginia, Washington and West Virginia. *This list is updated as additional states complete the contract process. All contracts expire Sept. 30, 1995; however, renegotiations will be undertaken to continue the agreements.* Other states may be willing to grant reciprocity. Graduates of Pennsylvania-approved programs are advised to contact the teacher certification office in the state in which they wish to obtain certification for application forms and instructions. The names and addresses of the appropriate officials should be available in most college placement offices.

Admission to Candidacy

Students should submit application to candidacy no later than completion of 65 credits. Transfer students should submit application to candidacy after completion of the first semester at Bloomsburg University, but not before the second semester of their sophomore year. Enrollment in upper division teacher education coursework (300 and 400-level courses) is contingent upon admission to the teacher education program.

1. Possession of an overall cumulative

2. grade point average of 2.5 or higher.
2. Successful completion of a five to 10-day noncredit field experience in the freshman year or at the earliest possible time in the case of transfer or non-traditional students.
3. Submission of two (2) recommendations from teacher education faculty.
4. Successful completion (grade of C or better) of two English composition courses or Honors Composition, and Public Speaking or interpersonal communication course.
5. Completion of speech screening, hearing screening and tuberculosis screening. (Speech and hearing screening tests can be completed at no cost to the student in the Speech, Hearing and Language Clinic in Navy Hall. Tuberculosis testing is available each semester at minimal cost to students).
6. Possession of a professional liability insurance policy is highly recommended.
7. Submission of a resume that includes personal interests, special skills and experience with children, youth or adults that would be relevant for a preservice teacher.
8. Completion of Act 34 clearance.
9. The completed admission packet should be submitted to the faculty adviser, who will review the packet, interview the student and submit a recommendation to the department chairperson indicating that the student be admitted or not be admitted to the program.

Admission to teacher education programs permits students to schedule upper division teacher education courses (300 and 400 level).

Monitoring

1. Completion of all professional education courses with a grade of C or better.
2. Maintenance of an overall cumulative grade point average of 2.5 or better and an average of 2.5 or better in the area of academic specialization or be placed on probation one semester. If grade point average falls below 2.5 overall, or below a 2.5 in the area of academic specialization in a secondary

- education program beyond one semester, then dismissal from the program, but not the department, occurs. Students will remain in the department for one additional semester after dismissal from the program so that appropriate advisement is available to the student.
3. Continuation of field and clinical experiences as outlined in the curriculum.
4. Continuation of professional liability insurance is recommended.
5. Students are required to make contact with their adviser(s) throughout the program of study.

There will be close supervision of the above criteria by advisers and chairpersons to ensure student teaching eligibility and to suggest counseling and/or remediation.

Eligibility for Student Teaching

Eligibility for student teaching will be determined at the scheduling period prior to the semester of student teaching. Student teaching eligibility is contingent upon:

1. Completion of the admission to candidacy process.
2. Possession of an overall cumulative grade point average of 2.5 or better and an average of 2.5 or better in the area of academic specialization.
3. A grade of C or better in all professional education and specialty courses.
4. Completion of appropriate methods courses determined by each teacher education program.
5. Continuation of a professional liability insurance policy or presentation of evidence of membership in a professional education organization providing professional liability insurance.
6. Completion of Act 34 clearance.

Competency in Student Teaching

1. Recommendations from and competency evaluation by cooperating teacher(s).
2. Recommendations from and competency evaluation by university supervisor(s).
3. A grade of C or better.

Exit Criteria

1. Completion of the prescribed teacher education curricula with an overall

cumulative grade point average of 2.5 or better and a 2.5 average in the area of specialization.

2. Demonstration of competency in student teaching.

In order to receive Pennsylvania Department of Education Instructional Level I certification, candidates must successfully complete Praxis Series (cutoff scores to be established by the secretary of education): Core battery tests (general knowledge, communication skills, professional knowledge) and specialty tests.

Student Teaching

Teacher education culminates in student teaching. Having satisfied the prerequisites for student teaching courses, undergraduates are assigned to positions in public or private schools for the first or second semester of their senior year. They are placed based on the availability of qualified cooperating teachers in their subject area and the willingness of schools with programs approved by the university. Students should be prepared to accept assignments in any of the student teaching centers.

A student teaching semester is divided into two equal periods so that students may teach at two grade levels and frequently in two socio-economic environments. Because of constantly changing educational and socioeconomic circumstances, flexibility of format is maintained in the student teaching program.

Student Teaching Centers

Student teaching centers and cooperating teachers are drawn from urban, suburban, and rural areas. Students in early childhood, elementary and secondary education may be assigned to Central Pennsylvania, to suburban Philadelphia, or to inner-city locations. Business education student teaching centers are located in the Bloomsburg, Allentown, and Williamsport areas.

Student may arrange their student teaching assignment in one of the international centers with which Bloomsburg cooperates, for example, in Liverpool or London, England. Information about this program may be obtained from department chairpersons.

Cooperating Teachers and Clinicians

Cooperating teachers and clinicians are selected by faculty in teacher education based on criteria set forth by the Pennsylvania Department of Education. These parameters are:

1. At least three years of teaching

experience, one year of which has been in the district to which the teacher candidate is assigned;

2. A teaching assignment appropriate to the subject competency of the teacher candidate;
3. Completion of a program of preparation on observation and evaluation skills developed by the college or university for the cooperating teacher.

Training at the university is achieved through the following means:

1. Individualized training;
2. Use of student teaching and clinical manual;
3. Providing research and reading materials to cooperating teachers and clinicians on a regular basis;
4. Consortiums (cooperating teachers/clinicians are invited to a yearly meeting);
5. Graduate course offerings.

School of Health Sciences

M. Christine Alichnie, assistant dean

The School of Health Sciences, one of the two schools organized under the College of Professional Studies, offers health science programs at both the undergraduate and graduate levels in adult health, allied health, communication disorders, and nursing. Administrative responsibilities for the programs in adult health and communication disorders are assumed by the Department of Health, Physical Education, and Athletics and Department of Communication Disorders and Special Education, respectively. Information regarding the curricula for these programs is presented in this catalog under their subject titles.

Allied Health Sciences

James E. Cole, coordinator

The allied health sciences encompass those health areas in which individuals support, aid, and increase the efficiency and effectiveness of other health care professionals by becoming a contributing member of the health care team. The curricula offered at Bloomsburg include medical technology, radiological technology, health services associate, pre-occupational therapy, pre-physical therapy, and pre-cytotechnology. Completion of these programs involves clinical education and experience – usually away from the campus. The university offers degrees for the first three curricula,

namely a bachelor's degree for medical technologists and radiological technologists and an associate degree in health services.

An affiliation with Thomas Jefferson University's College of Allied Health Sciences in Philadelphia facilitates transfer of students from the preparatory curricula of physical therapy, occupational therapy, and cytotechnology into baccalaureate and masters programs. Also, Bloomsburg University is an active participant in the P.A.C.E. program sponsored by Thomas Jefferson University.

Nursing Program

M. Christine Alichnie, chairperson

Degree and Licensure

The nursing program at Bloomsburg University provides learning opportunities in nursing and related disciplines which enable students to attain attitudes, knowledge, and skills essential to the role development of a beginning practitioner. The baccalaureate program culminates in the Bachelor of Science in Nursing (BSN) and qualifies its graduates to sit for the licensure examination administered by state boards of nursing which establishes them as registered nurses. The nursing program at Bloomsburg is not only a conduit for further education but also for lifelong learning activities.

In accordance with the Professional Nursing Law (P.L. 317, No. 69, Jan. 1, 1986) a felonious act prohibits a person from obtaining licensure in Pennsylvania. In compliance with this legislation, the following guidelines are enforced by The Pennsylvania State Board of Nursing.

A license or certificate shall not be issued to an applicant who has been:

1. Convicted* of a felonious act prohibited by the act of April 14, 1972, (P.L. 233, No. 64) known as *The Controlled Substance, Drug, Device, and Cosmetic Act*;
2. Convicted* of a felony relating to a controlled substance by a U.S. court of law or by any other state, territory or country unless:
 - a. At least 10 years have elapsed since the date of conviction;
 - b. The applicant satisfactorily demonstrates to the board significant progress in personal rehabilitation since the conviction such that licensure should not create a substantial risk of further violations;

- c. The applicant otherwise satisfies the qualifications contained in this act.

*Convicted includes a judgment, an admission of guilt, or a plea of nolo contendere. A person convicted of any felonious act may be prohibited from licensure by the Pennsylvania State Board of Nursing at any time.

Student Employment

In accordance with the Pennsylvania Professional Registered Nurse Rules and Regulations, students who are employed in health agencies may not be employed as registered or practical nurses unless they are currently licensed.

Accreditation

The Bachelor of Science in Nursing (BSN) program is accredited by the National League for Nursing and fully approved by the Pennsylvania State Board of Nursing.

Application Categories

Applications to the nursing program fall into two categories: freshman and transfers.

Freshman—A secondary school student or secondary school graduate without any postsecondary experience (formal education beyond secondary school).

Transfer Candidate—An applicant who was previously enrolled at Bloomsburg University or who was enrolled in a postsecondary educational program.

Admission Requirements and Process

Freshmen Candidates

Secondary school students should submit an application to the university's Office of Admissions early in their senior year. (See section on *Admissions, Financial Aid, Fees*) Secondary school graduates who have had no formal education beyond secondary school, must apply early in November to be considered for the spring semester or early in February to be considered for admission in the fall semester.

The following guidelines are used to evaluate freshman candidates for admission to the Bachelor of Science in Nursing program:

- a. 18 academic units from secondary school. These units must include a minimum of 4 units of English, 3 units of social studies, 2 units of mathematics (1 of which is algebra), and 2 units of science with a related laboratory or the equivalent, plus 7 other academic units in grades 9 through 12.
- b. B average or above in secondary

school.

- c. A or B in secondary school chemistry.
- d. 950 SATs with a minimum of 450 in each portion.
- e. Rank in top 25 percent of secondary school class.

It is important that the candidate indicate nursing as the major. The Office of Admissions uses these guidelines in accepting freshman students directly into the nursing program. Nursing faculty consult with the Office of Admissions as necessary regarding candidates for admission. An interview is not required, but the Department of Nursing faculty are available to talk with prospective candidates.

Transfer Candidates

External Transfers

- a. Candidates with college credits from institutions other than Bloomsburg University must apply directly to the Office of Admissions. (See section on *Admissions, Financial Aid, Fees*. The Office of Admissions reviews the application and evaluates the credits from the transcripts submitted and if the candidate meets the requirements for transfer into the university, the application is forwarded to the Department of Nursing*. The department chairperson and the Student Admission, Progression, and Retention (SAPR) Committee review the application for admission to the baccalaureate nursing program. The minimum requirements beyond those for admission to the university are a QPA of 2.5, 16 or greater earned academic credits and evidence of a minimum grade of C in several prerequisite science courses. Grades attained in prerequisite science courses outweigh the overall QPA. The chairperson of the Department of Nursing makes the decision relative to admission based on the committee's recommendation and available positions. Notification of acceptance is forwarded by the Admissions Office.
- b. Candidates who are registered nurses must apply directly to the Office of Admissions. Official transcripts from all previously attended postsecondary educational institutions including those colleges affiliated with the hospital schools must be included with the application. To gain admission to

the nursing program, the candidate must be a graduate of a state-approved associate degree or diploma nursing program. The Office of Admissions reviews the application and evaluates any credits from the official transcripts submitted. If a candidate meets the admission guidelines for a registered nurse, his/her application is forwarded to the Department of Nursing*. The minimum requirements and process from this point is the same as for other external transfer students.

- c. Individuals seeking a second bachelor's degree are considered for admission to the nursing program by the Nursing Department's chairperson. An appointment with the chairperson is encouraged prior to submitting an application to the Office of Admissions for review. The guidelines for freshman admission to the nursing major are followed for such applicants. (See the section on *Admission, Financial Aid, Fees*)

* The Student Admission, Progression, and Retention (SAPR) Committee generally reviews transfer applications biannually. Applications must be completed and sent to the Office of Admissions by September 15 for spring admission or by February 15 for fall admission. Only completed files are forwarded to the department on these dates.

Internal Transfers

Students majoring in other academic disciplines at the university who wish to transfer into the nursing program must apply directly to the Department of Nursing's chairperson. They must meet the guidelines for freshman candidate admission as well as provide evidence of a QPA of 2.5. The candidate seeking transfer sends a letter to the chairperson of the Department of Nursing requesting admission into the nursing program. Upon receipt of the letter, the candidate is sent a "Student's Academic File Transfer Request" form which allows the candidate to obtain his/her academic file from the current department and deliver it to the Nursing Department. The record will then be reviewed by the Student Admission, Progression, and Retention (SAPR) Committee. From this point, the process is the same as for external transfers; however, notification of acceptance of internal transfer is sent from the chairperson of the Department of Nursing.

Academic Good Standing Policy

Students in the baccalaureate nursing program must abide by both the university's academic good standing and retention policies and the academic good standing policy of the Department of Nursing. To progress and be retained in the nursing program, the student must:

- I. Attain a grade of C or better in:
 - a. Prerequisite natural science courses: Anatomy and Physiology I, Anatomy and Physiology II, Introductory Chemistry, Physiological Chemistry, and Introductory Microbiology
 - b. Prerequisite social sciences courses: General Psychology, Life Span Psychology, and Principles of Sociology or Contemporary Social Problems or Principles of Cultural Anthropology
 - c. All Code 82 nursing courses
2. Obtain a cumulative QPA of 2.50 (after 30-32 semester hours) to enroll in nursing courses in the sophomore year.

A student who does not meet the identified requirements for departmental academic good standing is required to satisfy the identified deficiencies by repeating the course before further progress in the nursing program can be attempted.

A student may repeat nursing courses only once. The university policy on the repetition of academic courses applies to the Department of Nursing.

The department reserves the right and the responsibility to develop procedural guidelines for the implementation of this academic good standing policy.

Recommendations concerning academic progression and retention are made to the Department of Nursing chairperson by the Student Admission, Progression, and Retention Committee. Based on these recommendations, students who do not attain academic good standing after one academic period on probation will be required to take a departmental leave of absence.

Departmental Academic Probation

Students who fail to meet the requirements of the policy for departmental academic good standing are evaluated by the Committee on Student Admission, Progression, and Retention and are immediately placed on departmental academic probation.

The department chairperson is responsible for notifying students who have been placed

on probationary status.

Students must satisfy any identified academic deficiencies by repeating the course(s) before they can attempt any further progress in the nursing program.

Nursing courses may only be repeated once. University policy that pertains to the repetition of academic courses applies to the Department of Nursing.

A student who does not attain academic good standing after one academic period on probation will be required to take a departmental academic leave of absence.

Departmental Academic Leave of Absence

A student who does not maintain departmental good standing requirements after one semester on probation or a total of three semesters on probation is automatically required to take a leave of absence from the department.

The department chairperson notifies students of such actions.

A student on a departmental academic leave of absence is ineligible to attend any course offered by the Department of Nursing. When on departmental academic leave, a position will be guaranteed for the student for no more than one calendar year. If at the end of one calendar year the student is not ready to return from departmental academic leave of absence, that student will be considered to be withdrawn from the program.

A student seeking reinstatement from a departmental academic leave of absence must do so in accordance with the departmental transfer policy.

Statute of Time Limitation

Once a student has begun the first required 82____ departmental course, all required 82____ departmental courses must be completed within five calendar years.

Departmental Retention

Because of the nature of nursing, the nursing faculty reserves the right to counsel, suspend or dismiss those students who, in their judgement, do not satisfy the requirements of scholarship, health and personal suitability for nursing and licensure.

Health Policy

Based on the requirements of the Pennsylvania State Board of Nursing and contractual agreements with agencies that provide clinical practice sites, the Department of Nursing re-

quires students to have a yearly physical examination, specific diagnostic tests, and immunizations. Dental and eye examinations also are required upon admission. The University Student Health Center is responsible for student

medical records. These records serve as verification of satisfactory health which is required for progression in the baccalaureate nursing program.

School of Extended Programs

G. Michael Vavrek

Dean, School of Extended Programs

The School of Extended Programs, located at the Magee Center, 700 West Main Street, Bloomsburg, administers and coordinates many university-wide efforts to provide lifelong education for citizens of the region. The school's major components include: Center for Regional Development, cooperative education and academic internships, Magee Center, non-credit programs and services, non-degree and adult programs and service, Air Force and Army Reserve Officers Training Corps: Air Force and Army, and summer session.

Center for Regional Development

The School of Extended Programs is the university's focal point for public service. The Center for Regional Development coordinates many of the university's outreach programs and services for the benefit of communities throughout northcentral Pennsylvania.

A directory of the university's public services to business, industry, governmental agencies, non-profit groups, older adults, children, volunteers and other groups is available from the school.

Cooperative Education and Academic Internships

Participation in the university's internship and cooperative education program can add an important dimension to a student's educational experience and future career plans. Students apply the theory learned in the classroom to situations occurring on the job in the workplace.

Because academic departments determine the credit and grade values for an internship or co-op experience, students must comply with any criteria required by their majors. Careful planning with the department's internship or co-op coordinator enables the student to schedule these experiences to compliment their academic program.

Cooperative education integrates classroom

study with paid, planned, and supervised work experiences in the public and private sectors. Co-op students spend at least one semester and a summer working full time off-campus in a job usually related to their course of study at the university.

Internships are reserved for upperclassmen who customarily spend the summer before or a semester during the senior year involved in a project-oriented work assignment either on or off campus. While some interns are paid, others may be volunteer. Information is available at 15 Ben Franklin Hall, (717) 389-4678.

Magee Center

The Magee Center was donated to the university by the Trustees of The Magee Foundation in 1988 as a public service center. Located at 700 West Main St., 1.5 miles west of the lower campus, the center offers executive-style meeting facilities for university and community groups. The building also serves as the headquarters for the School of Extended Programs which is responsible for the management of the center's meeting space and support services. For information on reserving these facilities, call (717) 389-4420.

Noncredit Programs and Services

Noncredit mini-courses provide opportunities for individuals to gain specialized knowledge and skills for career purposes or to pursue cultural, recreational, and special interests through short-term experiences without academic credit.

These courses reflect expressed community needs. A nominal course fee is charged. Individuals who wish to enroll in the mini-course program are not required to file credentials; in most cases, the only formality is that of registration with the School of Extended Programs for the course(s) desired. The catalog is available each semester.

The university serves the educational requirements of professional, educational, governmental, business, and other community

groups by offering customized workshops and conference facilities, including satellite teleconferences. In the summer, the university can accommodate conference groups overnight. Scheduling and hosting conference groups rests with the School of Extended Programs. Organizations may contact the school's office at (717) 389-4420.

Nondegree and Adult Programs and Services

Based on the assumption that learning should be a lifelong process, the nondegree credit program provides for enrollment by an individual in regular undergraduate credit courses without formal admission to the university as a degree candidate. Individuals are invited to use this program as an opportunity to review skills, acquire new knowledge, and pursue cultural and intellectual interests. Day and evening classes are held on the Bloomsburg campus and at off-campus locations.

Semester hours earned in courses taken as a nondegree student may later apply toward a degree program provided the course is deemed appropriate. Courses taken by nondegree students also can be used for a variety of designated certificate programs and to meet undergraduate deficiencies for graduate study. (For regulations that pertain to a nondegree status, Category 510, in the School of Graduate Studies, see the *Graduate Studies Catalog*.)

Advisement for non-degree students is provided through the Office of Nondegree and Adult Advisement, Ben Franklin Hall, Room 12. Students can obtain information related to course selection, alternative ways to earn college credits, and financial aid. Adults without SAT scores can get advice on taking the I5 required semester hours to transfer into a degree program. Students enrolling in a Category 8 certificate program must have the endorsement of their nondegree adviser. Students pursuing teacher certification are advised through the College of Professional Studies.

Admission to the non-degree credit program is open to all secondary school graduates or persons holding a General Equivalency Diploma (GED). No standardized tests are required for admission.

Undergraduate nondegree students fall into eight categories. All categories require the submission of a nondegree admission application and a course selection form which can be obtained from the Office of Nondegree and Adult Advisement or the Admissions Office. In addition, applicants must submit any academ-

ic credentials that are applicable to the category for which they are applying. Admission forms and academic credentials for Categories 3 and 6 must be submitted to the Office of Admissions; students in all other categories submit their paperwork to the Office of Nondegree and Adult Advisement. The academic credentials requirement is listed after each specific nondegree category as follows:

Category 1: Adults who desire to enroll on a part-time basis. (Students enrolling to qualify for teacher certification, refer to Category 6.) Credential requirement: Completed application for nondegree admission.

Category 2: Students enrolled at an institution of higher education who desire to complete coursework at Bloomsburg University for purposes of transfer to their home institutions. Credential requirement: Completed application for nondegree admission. Students in this category should make certain that coursework pursued at Bloomsburg University satisfies course requirements at their home institution.

Category 3: Students approaching their final year of secondary school who wish to enroll at Bloomsburg University in conjunction with their last year of secondary school work or who are enrolled in a gifted program. Credential requirement: Secondary school transcript, junior year SAT scores, letters of recommendation from a secondary school counselor and two secondary school instructors in the academic area of intended pursuit.

Note: All credentials and a nondegree admission application must be submitted to the Office of Admissions.

Category 4: Students with academic deficiencies who are seeking a graduate degree at Bloomsburg University. Credential requirement: Completed application for nondegree admission.

Category 5: Students with academic deficiencies who wish to pursue a program of academic recovery to qualify for undergraduate admission. Credential requirement: Completed application for nondegree admission.

Category 6: Students with a baccalaureate degree interested in completing the

requirements for Level I or Level II teacher certification. Credential Requirement: Official transcript from the institution that granted a baccalaureate degree. (See an adviser in the College of Professional Studies for help with course selection.) *Note: All credentials and a nondegree admission application must be submitted to the Office of Admissions.*

Category 7: Senior citizens (persons over 60 years of age) who are retired, legal residents of the United States, living in Pennsylvania. Students in this category may be admitted to a class on a seat available basis only. Credential requirement: Proof of age, retirement, and U.S. residency, and completed application for nondegree admission.

Category 8: Students who are seeking a certificate program in any of the seven designated areas. Credential requirement: Official secondary school transcript required before student can schedule.

For assistance with nondegree programs, call (717) 389-4003.

Experiential Learning

In an effort to provide for those who have in the course of their life experience obtained knowledge and skills applicable to a college experience, the university provides the opportunity for experiential learning assessment. Through this process, life experiences are evaluated to determine their appropriateness and applicability for university credit. For details regarding this process, contact the school at (717) 389-4420.

Attendance Fee Program

The attendance fee program allows individuals to attend classes without credit. Admission on this basis depends upon available space and the payment of a \$25 fee per course. Courses attended through this process do not earn college credit. A student desiring to attend classes in this manner must obtain verbal permission from the instructor before processing the form at the Business Office.

Certificate Programs

Designed specifically for nontraditional,

career-oriented students, certificate programs represent packages of undergraduate credit courses that have been developed to meet the needs of those interested or working in the occupations associated with each program. Each program culminates in a certificate indicating the successful completion of each prescribed course and the overall program. Students must attain a minimum QPA of 2.0. For information, call (717) 389-4003.

Certificate program titles include: Community Recreation Leader, Community Services, Environmental Planning, Gerontology, Public Administration, and Theater and Music.

ROTC Programs

For information about the U.S. Air Force and Army Reserve Officers Training Corps programs available to Bloomsburg University students and course descriptions, see *Military Science*.

Summer Session

Undergraduate and graduate courses are offered in the summer sessions on campus and at off-campus locations. Students may schedule as many semester hours in a session as the number of weeks in that session. An overload requires the approval of the appropriate college dean.

Undergraduate courses are open without formal application to regularly enrolled students of the university who wish to enrich or accelerate their programs of study or make up academic deficiencies. Others must apply for nondegree admission through the school.

Students from other colleges are admitted to summer session upon the filing of a simplified nondegree application form.

Graduate courses are offered for students who wish to continue their education at the master's level and/or to qualify for permanent certification. (See the *Graduate Studies Catalog*.)

Special workshops are scheduled to provide teachers in-service and other professional groups with specific training programs at times and locations convenient to their schedules and places of employment. The *Summer Session Bulletin*, which includes undergraduate and graduate courses, may be obtained from the school or the Registrar's Office.

School of Graduate Studies

Patrick J. Schloss**Assistant Vice President for Graduate Studies
and Research**

Bloomsburg University offers 18 master's programs in the arts, business, science, and education through its School of Graduate Studies, as well as a joint doctoral program in education in cooperation with Indiana University of Pennsylvania, and 11 supervisory certificate programs.

Graduate classes taught during the academic year are usually scheduled in late afternoons, evenings, and on Saturdays in order to provide an opportunity for teachers and individuals engaged in other full-time occupations to further their education. Graduate courses also are offered for full-time students in the summer sessions.

Masters programs are offered in the following areas:

Master of Arts — Art Studio, Art History, Communication Studies

Master of Business Administration

Master of Education — Biology, Business Education, Curriculum and Instruction, Ele-

mentary Education, Reading

Master of Science

Audiology, Biology, Early Childhood Education, Education of the Deaf/Hard of Hearing, Exercise Science and Adult Fitness, Instructional Technology, Special Education (Mild, Moderate, Severe Profound), Speech Pathology

Master of Science in Nursing

Supervisory Certificates are offered in the following areas: Communication, Curriculum and Instruction, Early Childhood Education, Elementary Education, Foreign Language, Mathematics, Reading, School Health Services, Science, Social Studies, Special Education.

Graduate Studies Catalog

The *Graduate Studies Catalog*, with comprehensive descriptions of courses, degree programs, university policies, faculty, and regulations is available upon request. Write to the Assistant Vice President for Graduate Studies and Research, 109 Waller Administration Building, Bloomsburg University, Bloomsburg, PA 17815.

Admission, Financial Aid, Fees

Admission

Address correspondence concerning admission and readmission to: Director of Admissions, 10 Benjamin Franklin Hall, Bloomsburg University, 400 E. Second St., Bloomsburg, PA 17815-1301; or telephone (717) 389-4316 between 8 a.m. and 4:30 p.m., Monday through Friday.

Admission Procedures

Complete and submit an application to the Office of Admissions, with a \$25 nonrefundable application fee payable to Bloomsburg University. Freshman candidates should begin the application process early in their senior year of high school, prior to Dec. 1, for the fall semester. Candidates for the spring semester should submit application materials by Oct. 1. Final dates for receiving applications in the Admissions Office for an entry period are subject to change without notice.

Applicants also need:

- An official secondary school transcript requested from and sent by a high school guidance counselor directly to the Director of Admissions.
- Results of the Scholastic Assessment Test (SAT) or the American College Test (ACT). The applicant is responsible for taking the test and requesting that the scores be forwarded directly from the testing service to Bloomsburg University. A photostatic copy of the student's SAT or ACT results on an official secondary school transcript is acceptable. No other standardized test serves as a substitute for the SAT or ACT.

Entrance Standards and Notification Procedures

The university does not prescribe fixed secondary school course requirements for admission but does, however, strongly encourage all students to take a college preparatory program in secondary school. Admission to Bloomsburg University is based on an applicant's academic and personal qualifications. Decisions are reached without regard to race, color, creed, national origin, sex or disability. Acceptance is determined by the Admissions Committee upon evaluation of secondary school preparation, scores on the SAT or ACT, personal char-

acteristics, and institutional capacity.

The majority of notifications are made during December, January, and February.

Incoming fall freshmen must submit a partially nonrefundable advance deposit of \$200 for the basic fee and housing by March 1 to secure enrollment at the university.

Health Record

An applicant offered admission must submit a medical examination report form prior to enrollment. Applicants get the appropriate examination report form upon receipt of advance deposits. Final permission to enroll is contingent upon a favorable review of the applicant's medical history by a university physician.

Act 101 and Educational Opportunity Programs

These programs equalize educational opportunity for students regardless of their economic background or status. Anyone with a secondary school diploma or certificate of equivalency is eligible to apply for admission to these programs. Nontraditional criteria are applied in estimating the potential success of an applicant when it appears that the environmental background may have adversely affected grades and/or standardized test scores. The Director of Admissions may require an applicant for these programs to file supplementary information as needed for proper consideration.

Most new students are expected to participate in a summer program prior to the first semester of their attendance, where special assistance in tutoring and counseling is given to address specific academic, financial, and social needs. Permission to be exempted from this requirement can only be granted by the director of these programs.

Send inquiries to the Director of ACT 101/EOP or the Director of Admissions. (See Developmental Instruction.)

Early Admission

Outstanding students may be considered for admission before secondary school graduation. In addition to strong achievement and high aptitude, applicants for early admission must have the endorsement of their secondary school to receive consideration. College credit earned may apply toward the require-

ments for a secondary school diploma. Students interested in early admission should arrange an interview with the Director of Admissions.

University Scholars Program

The University Scholars Program provides a special academic experience for a preselected group of freshmen and sophomores. The program offers challenge for students who have distinguished themselves educationally, have superior intellectual ability, set high standards for themselves, and who plan to seriously pursue a quality college education.

The scholars curriculum fosters the growth of intellectual independence, creativity, and initiative; enhance analytical thinking and problem-solving abilities; augment interpretative abilities and communication skills; and develop a sense of "common bonding." Students get a variety of courses and course designs including symposia, forums, independent study, and experiential study that require extensive reading, writing, and in-depth study and research. The scholars courses are taught by university faculty designated because of distinguished scholarship, outstanding performance as teachers, and ability to relate to students.

The scholars program requires the completion of 24 semester hours of general education credit in designated scholars courses within the first two academic years. The remainder of courses in these years is selected from regular course offerings to satisfy major, minor, and other general education requirements. Scholars courses, while they satisfy general education requirements, are specially designed to emphasize the integration of interdisciplinary knowledge, concepts, and skills.

Although university scholars have many special programs and services, they also are fully integrated into the mainstream of the campus community to enjoy the same dimensions of university life that other students experience including residence hall living, a wide array of cultural activities, campus leadership opportunities, sports events, and other co-curricular programs.

Scholars program eligibility is based upon high school achievement, a ranking in the top 20 percent of the graduation class, and above average standardized test results. Once eligible, high school seniors or graduates are selected on the basis of their application, essay, reference letters, and interview. Although high academic achievement provides eligibility, per-

sonal characteristics and extracurricular involvement are important in the selection process.

Students admitted to the University Scholars Program must maintain a minimum cumulative 3.0 QPA. Students who do not attain this QPA in the first semester will be retained provisionally in the program with the stipulation that the 3.0 QPA must be attained overall before the sophomore year.

At the completion of the program, a student who has maintained a minimum QPA of 3.50 or higher will be designated a university scholar on his/her permanent record and on the diploma upon graduation.

At the end of the sophomore year, students can apply to the upper-level honors program in their major discipline to continue in enhanced academic programs during their final two years.

Transfer Students

An applicant who previously attended or at the time of application is enrolled in another college or university is a transfer applicant. Transfer admission occurs three times during the year: fall, spring and summer. Applications for the fall semester and summer sessions should be complete and on file in the Admissions Office prior to March 15. Applications for the spring semester must be complete and on file by Oct. 15. Nursing candidates for the fall semester must have completed applications on file by January 15 and by September 1 for Spring admission.

Requirements necessary to make a file complete for a transfer candidate include: an official secondary school transcript or a GED (General Equivalency Diploma); official transcripts from all postsecondary schools attended; and the \$25 application fee. Scholastic Assessment Test (SAT) or American College Test (ACT) results must be submitted if the applicant has not completed 24 or more credits at a postsecondary institution. Official college transcripts from each school attended should be sent to the Director of Admissions regardless of whether or not credit was earned at the other institution(s).

A transfer student may be considered for admission if certified as holding good standing academically and otherwise in the college last attended and having an overall Quality Point Average (QPA) of 2.0 or better on a 4.0 system.

The degree programs in adult health, nursing or education require students to have a

minimum cumulative QPA of 2.50 for entrance to the major.

Transfer applicants who have completed 30 semester hours at an institution of higher education must select a major upon entering the university. They may not enter as undeclared majors.

Credits are deemed transferable if earned with a grade of C (2.0/4.0) or above at an institution that is accredited by the Middle States Association of Colleges and Schools/Commission on Higher Education or its regional equivalent providing Bloomsburg University has equivalent courses. Students are informed of the tentative number of credits that may be transferred in their offer of admission letter. Official transfer evaluations are completed after the student pays the advanced deposits. These transfer credit evaluations are then reviewed by the department chairperson who renders final approval of the evaluation. A maximum of 64 credits may be transferred from an regionally-accredited two-year college.

Review of transfer applications is done on a rolling basis, with the exception of nursing applicants whose files are reviewed by the Student Admission, Progression, and Retention Committee of the School of Health Sciences.

An orientation for transfer students is held prior to their enrollment. Students are notified by the Orientation Office concerning specific information.

Readmission

Students failing to register for the next semester must apply for readmission. Nondegree students may continue to register without readmission provided their next registration is within four semesters of their last enrollment. It is suggested that students apply early for readmission.

Readmitted students are responsible for the graduation requirements and academic policies that exist at the time of their reentrance.

The Director of Admissions may require an applicant for readmission to file a letter containing such supplementary information as is needed for proper consideration.

Students under academic dismissal are ineligible for readmission for one calendar year. They should present evidence of successful achievement at another college or university as part of their application for readmission.

Readmitted students who were formally dismissed for academic deficiency have two final grading periods in which to regain minimum academic progress or good standing. If dis-

missed the second time, these students may not attend the university for additional degree or nondegree credit study.

Temporary Withdrawal/ Leave of Absence

A student may request a temporary withdrawal for a specified period by securing the appropriate forms at the Office of the Registrar. To be eligible for a temporary withdrawal, the student must submit completed forms to the Office of Admissions for processing. A student must be in academic good standing or making minimal progress toward good standing and must request the temporary withdrawal prior to the registration date of the intended period of absence.

A student on a temporary withdrawal is assured a place in the semester designated for return provided the instructions that are part of the temporary withdrawal agreement are fulfilled, and advance deposits are submitted at the time designated by the Director of Admissions.

A student who returns from a temporary withdrawal of a calendar year or less in duration is responsible for the graduation requirements and academic policies that applied at the time the temporary withdrawal was requested. A student who returns from a temporary withdrawal of more than one calendar year duration must satisfy the graduation requirements and academic policies which exist at the time of return and is then classified as a readmitted student.

Second Baccalaureate Degree

Application materials and instructions for obtaining a second bachelor's degree at Bloomsburg University may be secured from the Office of Admissions. There is an application fee of \$25. To qualify, an applicant must hold a bachelor's degree from an regionally-accredited college or university.

This second degree track requires a student to earn a minimum of 30 semester hours in undergraduate courses while in residence at the university. All curriculum requirements for the second degree must be satisfied and free elective credit taken, if necessary, to complete the minimum of 30 semester hours.

If there is a replication of a required course(s) in the two baccalaureate programs, the course(s) cannot be applied as part of the 30-semester-hour requirement for completion of the second degree.

The applicant must provide the department

chairperson from the discipline they wish to pursue, with a copy of their official college transcript and a second degree application form. Pending a favorable review of the applicant's academic credentials, the chairperson signs the application and forwards it and the official transcript to the Admissions Office.

International Students

Residents of foreign countries should initiate their application well in advance of the semester they plan to enroll. Non-U.S. citizens who are not resident aliens need to submit a special application for international students. This application may be obtained by writing the Director of Admissions. Students whose native language is other than English are required to submit the results of the Test of English as a Foreign Language (TOEFL) administered by the Educational Testing Service in Princeton, N.J. The minimum acceptable TOEFL score is 500. Those students who fail to earn a score of 500 are urged to investigate enrolling in the English as a Second Language course (ESL) that is offered at the university. Upon completion of the ESL program, the minimum QPA acceptable to supplement a TOEFL score of under 500 is a 2.5.

Certificates of educational training should be accompanied by certified translations if they are presented in a language other than English. Supplement credentials with brief course descriptions of subjects successfully completed. International transfer students must submit their credentials to an outside evaluation agency for course-by-course transfer evaluations. Instructions are given on the international student application.

Students must submit a notarized financial statement that would indicate their ability to finance their educational and living expenses for the duration of their college career. Due to financial limitations, students who are unable to provide for their educational and living expenses will not be offered admission to Bloomsburg University.

Campus Visits

Group information sessions are held regularly on campus. Arrangements can be made to attend a group information session by contacting the Office of Admissions at (717) 389-4316. The campus Visitors Center is located in the lobby of Waller Administration Building and is open weekdays, 8 a.m. to 4:30 p.m. and weekends, 10 a.m. to 3 p.m.

Four Saturday open house programs are

held in October, November, February and April in Mitrani Hall, Haas Center for the Arts, beginning at 9:30 a.m. Open House programs consist of a general meeting with admissions staff and administrative personnel, a question-and-answer session, a campus tour, lunch (at a nominal cost), and meetings with faculty from various academic departments. Participation in an open house day may be more meaningful than a group information session because prospective students have the opportunity to meet directly with members of the university faculty.

Off-campus Visits

Each year, representatives from the Office of Admissions visit secondary schools and community colleges throughout Pennsylvania and in neighboring states. They also participate in approximately 100 college night/career day programs including National College Fair programs in Philadelphia, Pittsburgh, and New Jersey. Prospective applicants should check with their school or community college counselors to learn if a Bloomsburg University admissions representative will visit their institution or a nearby college night program.

Financial Aid

Many financial aid programs are available to students at Bloomsburg University. These include scholarships, grants, loans and student employment.

Undergraduate, graduate, part-time and transfer students from every income bracket may be eligible for some type of financial aid — student employment, grants, scholarships or low-interest loans. By evaluating the financial aid sources and developing a sound financial plan, each student will have the monetary resources needed while minimizing potential debt burden.

Commonly used terms

The **financial aid package** is composed of a combination of a grant, a loan and/or campus work study. Students receive an award letter that outlines the types of financial aid which they will receive for the following year.

Financial need is the difference between the cost of attending college and the amount the needs analysis service calculates that a family can contribute to the cost of the student's education.

Student expense budget is the total cost of attending college and is used to determine each student's financial need. It depends upon whether students live at home, in a campus residence hall or off campus.

Grants are financial aid awards that students do not have to repay.

PHEAA (Pennsylvania Higher Education Assistance Agency) administers grant and loan programs to residents of Pennsylvania.

Pell Grants are federal grants of approximately \$200 to \$2,340. They are not repaid.

Scholarships are grants awarded on the basis of grades or other achievements rather than financial need.

Supplemental Educational Opportunity Grants (SEOG) provides federal aid to students who demonstrate an exceptional financial need. It supplements other forms of financial aid, and it is not repaid.

Loans are a form of financial aid that students must repay.

Lenders are participating commercial banks, federal and state savings and loan associations or credit unions that loan money to students. PHEAA is also considered a lender. Student loans in states other than Pennsylvania are made by similar institutions.

Interest is the annual fee charged for using loan money.

A **Perkins Loan** is made at a 5 percent annual interest rate. There are no interest charges while the student is in college.

Stafford Loans must be repaid, and they carry a 7.9 percent interest rate. An origination fee and insurance premium of approximately 4 percent are deducted from the total amount of each loan to help defray some of the interest the federal government pays during the student's undergraduate years.

Work-study awards are an authorization to work but do not guarantee employment. Students are responsible for finding their own campus jobs. The Financial Aid Office maintains a "placement" bulletin board outside Room 19, Ben Franklin Hall where available jobs are posted. Students must reapply each academic year/summer to renew their employment.

Stafford Loans

Academic Grade Level Limits	Amount
Undergraduate	
First year (freshman - 31 credits)	\$2,625
Second year (sophomore - 32 to 63 credits)	\$3,500
Third year (junior - 64 to 95 credits)	\$5,500
Fourth year (senior - 96 credits or more)	\$5,500

Fifth year (baccalaureate not completed)	\$5,500
Graduate (each year)	\$8,500
Aggregate Loan Limits	
Undergraduate	\$23,000
Graduate	\$65,500*

*includes undergraduate borrowings

Financial Need

Students must demonstrate "financial need" to qualify for assistance from "need-based" programs but do not necessarily have to be from a low-income family. "Need" is the difference between the cost of attending Bloomsburg University and what the student and/or family can contribute as calculated by a financial aid formula that is approved by the U.S. Department of Education.

When estimating how much students and their families may be able to contribute, a need analysis considers the student's and family's income and assets, including savings; the student's and family's ages and need for retirement income; the number of children or other dependents in the household; and the number of family members in college. Students are expected to contribute something from their savings and earnings.

The refund policy for students who receive financial aid has been established in accordance with regulations governing the Pennsylvania State System of Higher Education, PHEAA and the Title IV Financial Aid Programs. Students who leave the university during the semester are urged to review the refund policy.

Transfer students must submit to the Financial Aid Office an official Financial Aid Transcript that documents their financial aid record at all previous institutions attended. Financial aid does not automatically follow students when they transfer from one college to another, and no aid will be processed until this information is received.

Graduate students may apply for graduate assistantships that are offered each academic term. Qualified, full-time graduate students receive a waiver of tuition as well as payment of a stipend. Direct inquiries to the Office of Graduate Studies, Waller Administration Building, Bloomsburg University.

The Perkins Loan and Stafford Loans are available to qualified post-baccalaureate and graduate students. The loan application procedure is identical to that outlined for undergraduate students.

Graduate student employment opportuni-

ties under both the state and federally funded College Work-Study Program are available to full-time post-baccalaureate and graduate students. However, no student may have a State or College Work-Study job on campus and a graduate assistantship at the same time.

Non-degree students who are enrolled in non-degree certificate programs that exceed 24 credits in length may be eligible for financial aid. Application procedures are the same as those for degree students. Non-degree students who are not enrolled in a certificate program that exceeds 24 credits in length are ineligible for aid.

In addition to the costs for tuition, fees, room and board, students will incur costs for books, supplies, transportation, personal and miscellaneous expenses. Bloomsburg University expects that these annual expenses will be approximately \$2,200.

These estimated costs for 1994-1995 are subject to change without notice and are dependent upon the action of the Board of Governors of the Pennsylvania State System of Higher Education and the Bloomsburg University Council of Trustees.

Eligibility

All applicants for financial aid at Bloomsburg University must submit either the Free Application for Federal Student Aid or the Federal Renewal Application. Some students also will be requested to complete the PHEAA Status Notice, which will be mailed to the student by PHEAA. Eligibility for all financial aid programs at Bloomsburg is determined on the basis of the information submitted on these forms. There is no fee to process these applications.

Students must either submit verification that they have registered with the Selective Service Commission or sign a statement certifying that they are not required to register.

Students must be citizens or permanent residents of the United States. Students in the United States on F1 or F2 student visas are not eligible for federal aid.

Satisfactory progress must be maintained by all students to remain eligible for financial aid. Students are urged to become familiar with the university's satisfactory progress policy.

Satisfactory Progress

Students must earn at least 24 credits in a 12-month period with a required grade point average. Summer freshmen, who are enrolled for less than 12 credits during the summer, are

required to earn 21 credits during their freshman year. Students enrolled full-time for only one semester are expected to earn at least 12 credits. Part-time students and graduate students must earn credit hours as follows:

- 1 to 8 credit hours — half of all the credit hours attempted must be earned or
- 9 or more credit hours — two-thirds of all credit hours attempted must be earned.

Students must also meet the qualitative measures of progress shown in the chart below. Students are urged to review the withdrawal and repeat policies. Exceeding the maximum number of allowable repeats and/or withdrawals will adversely affect the student's ability to meet satisfactory progress standards for financial aid purposes.

Qualitative Measures of Progress

Total semester hours earned including grades of "P" and transfer credits	Cumulative quality point average required for minimal progress
1 - 16	1.25 - 1.99
17 - 32	1.65 - 1.99
33 - 48	1.85 - 1.99
49 - 64	1.95 - 1.99
65 or more	2.00

An incomplete grade, a failing grade, or a withdrawal from a course will count as zero credits earned. Course repeat grades will only be counted toward the minimum satisfactory progress standard if credits were actually earned. A repeat of a "D" grade will not be counted as credits earned in two different semesters.

Students are expected to complete their degree or certificate within a maximum time frame that is no longer than 150 percent of the published length of the program. For example, a full-time undergraduate student who is enrolled in a program that would normally take eight semesters to complete would be required to complete the program within 12 semesters unless extraordinary circumstances exist. The total semesters for completion of a program of study for a part-time student will be extended proportionally.

Students enrolled in a non-degree program must also meet satisfactory progress standards to obtain financial aid in subsequent semesters.

Students who are academically eligible to continue their enrollment but do not meet the guidelines, may attend classes at their own ex-

pense until they are eligible to receive financial aid.

Students who earn 24 credits, but who do not have the required grade point average, may receive financial aid for probationary semesters upon review by the Director of Financial Aid.

The Financial Aid Office monitors satisfactory progress each semester. Students are notified that aid is being canceled if the number of credits earned during the fall, spring and summer semesters does not meet satisfactory progress requirements.

Students who have been academically dismissed for at least one year will be considered making satisfactory progress for financial aid purposes upon their reinstatement to the university.

Any Bloomsburg student whose financial aid has been canceled because of unsatisfactory progress may appeal this decision in writing to the Director of Financial Aid.

Grants

Pell Grants are available to undergraduates who are pursuing their first baccalaureate degree. These grants will range from \$200 to approximately \$2,340 in 1995-1996. The Pell Grant application deadline is May 1, 1996.

Pennsylvania State Grants are designed for full-time and part-time (at least six credits per semester) undergraduate students who are residents of Pennsylvania and who are enrolled in a degree program.

These grants range from approximately \$100 to \$2,600 per year. To apply, students must use either the Free Application for Federal Student Aid or the Federal Renewal Application. Some students also will be required to complete the PHEAA Status Notice, which will be mailed to the student by PHEAA. The deadline for applications is May 1, 1995.

To remain eligible, students must maintain satisfactory progress and plan to complete their bachelor's degree within four years or eight semesters. Students may receive a PHEAA Grant for enrollment during the summer; however, a separate summer application is required. The summer semester counts as one of the maximum eight semesters of eligibility. Summer Pennsylvania State Grant applications are available from the Financial Aid Office in May and June.

Other state grants are available to many out-of-state students from their home states. These students are encouraged to investigate the availability of such financial assistance. The

names and addresses of State Grant Agencies are available at the Financial Aid Office.

Supplemental Educational Opportunity Grants (SEOG) are offered to students of exceptional financial need who would not otherwise be able to continue their education. Students are eligible to apply for this federal program if they have been accepted or are currently enrolled as full-time degree students. Grants range from \$200 to \$1,000.

To apply for these grants, students must complete either the Free Application for Federal Student Aid or the Federal Renewal Application and submit it to PHEAA no later than March 15, 1995.

Scholarships

Students are advised to review the complete list of scholarships that is available from the Financial Aid Office. Applications are available from the Financial Aid Office in January and must be completed and returned by 4:30 p.m., Feb. 10, 1995, for the 1995-1996 academic year. Students must also submit either the Free Application for Federal Student Aid or the Federal Renewal Application. Scholarships are not available for summer study.

Bloomsburg University Scholarships are designed for all undergraduate students who have been enrolled full-time during the fall semester 1994 and who will be enrolled in the 1995-1996 academic year. Unlike other aid programs, grades and extracurricular activities are considered foremost. Most of these scholarships range in value from \$100 to \$1,500 per year. Scholarships are available for students in many academic programs of study as well as in band or athletics. Awards are also offered to students who reside in certain communities or who meet other special criteria.

Bloomsburg University Alumni Association Scholarships and Grants are open to students majoring in various disciplines as well as students participating in band or athletics.

Mitrani Scholarships are awarded to new freshmen and are renewable for three additional years provided students maintain the required academic achievement level (3.2 after the freshman year and 3.5 each subsequent year). Freshmen applicants must rank in the top 20 percent of their high school class and score 1200 or above on the Scholastic Aptitude Test (SAT) with a minimum of 550 on each portion.

Students who may be eligible for the Mitrani Scholarships will be notified by the Admissions Office regarding application procedures.

Army ROTC Scholarships, which are available on a competitive basis for two-year and three-year periods, pay tuition and fees, a semester stipend for materials and books (approximately \$204), plus a monthly allowance for the duration of the scholarship. Recipients are obligated to serve four years on active duty as a second lieutenant and four years in the military reserves after graduation.

For more information, call the Army ROTC Office on the Bloomsburg campus, (717) 389-2123, or contact the Army ROTC Instructor Group at Bucknell University in nearby Lewisburg, Pa., at (717) 524-1246/1100 (call collect). Office hours are held from 8 a.m. to 4:30 p.m., Monday through Friday.

The Air Force ROTC program also offers financial aid opportunities. Contact the Air Force ROTC Office located in Wilkes-Barre, for more details, (717) 829-0194 or 1-800-WILKES-U, ext. 4860.

One PHEAA - Administered Scholarship Program is available to academically talented students who want to teach.

The Paul Douglas Teacher Scholarship (PDTs) of up to \$5,000 annually is awarded to eligible high school graduates on the basis of their academic achievement and a recommendation from a teacher or high school official. Applicants must sign an agreement either to teach for not less than two years in exchange for each year they receive the scholarship or to repay the award as a loan, including interest.

The application deadline is usually May 1, for the following academic year. Additional information and applications may be obtained from high school guidance counselors or through the PHEAA, Coordinator for Teacher Education Programs, P.O. Box 8114, Harrisburg, PA, 17105-8114.

Bloomsburg University Scholarships and Grants

Art

Chip Callahan Memorial Scholarship	\$100
John F. Cook Art Student Award	\$500

Arts and Sciences

John A. Hoch Scholarship	\$300
O.H. and S.H. Bakeless Alumni Grant	\$500

Athletics

E.H. Nelson Scholarship (Wrestling)	\$500
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Francis 'Doc' Sell Scholarship (Football)	\$500
Dick Lloyd Scholarship (Men's Basketball)	\$500
Lucy McCammon Scholarship (Women's Swimming)	\$500
Jan Hutchinson Scholarship (Softball)	\$400
Eleanor Wray Scholarship (Women's Basketball)	\$400
Clyde S. Shuman Sportsmanship Award, \$300	
Lamar Blass Memorial Scholarship	\$150
Dorothy Q. and Lloyd S. Wartman Memorial Scholarship Fund (two)	\$300
J.M. Auten - Women's Intramural Sports Scholarship	\$200
Eli McLaughlin Scholarship (men's swimming)	\$1,300
Robert Redman Scholarship (football)	\$600
Russ Houk Scholarship (wrestling)	\$2,000
Sesame Street Scholarship (five awards)	\$250
Vernon Rochester Award (football)	\$850

Band

Howard F. Fenstemaker Scholarship	\$300
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Biology

Biology and Allied Health Science Scholarship (three)	\$250
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Business

Accounting Scholarship	\$250
Beard and Company Accounting Scholarship	\$250

Bloomsburg Chapter, Professional Secretaries International Scholarship	\$150
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Nationwide/BU Alumni Scholarships	\$1,000
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Nationwide Insurance Enterprise Foundation Scholarship (two)	\$700
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Richard A. Benefield Scholarship	\$1,000
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John W. Matlavage Award	\$275
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Angelo Scheno Scholarship	\$500
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Mildred Eaton Levitt Scholarship	\$300
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Norman Hilgar Scholarship	\$300
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Harvey A. Andrus Scholarship	\$300
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Elizabeth Andrus Scholarship	\$500
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Walter S. Rygiel Scholarship	\$225
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William A. Lank Memorial Scholarship	\$1,000
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College of Business Scholarship	\$250
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Dr. Emory W. Rarig Jr., Pi Omega Pi Award	\$25
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Paul Yori, Jr. Award	\$500
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William Forney Award	\$25
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Chemistry		
David Murphy Memorial Scholarship		\$100
Junior Chemistry Achievement Award	\$100	
Chemistry Scholarship Award	\$350	
Communication Disorders		
James Bryden Scholarship	\$500	
Emily Reuwsaat Scholarship	\$500	
Frances Fay DeRose Memorial Scholarship	\$350	
Tammy Hrusovsky Scholarship	\$100	
Community Government		
Jerrold A. Griffis Community Government Association Award	\$1,000	
Robert G. Norton Community Government Association Leadership Award	\$1,000	
Early Childhood Education		
Early Childhood Education Scholarship	\$200	
Education		
A. Kenneth and Mery Betterly Maiers Scholarship (3 awards)	\$500	
Elementary Education		
Ann J. Jarrett Scholarship	\$250	
Charlotte Hess Memorial Scholarship	\$200	
Elizabeth Hubler Award	\$100	
English		
Catherine O. Renninger Scholarship	\$1,000	
Margaret Bittner Parke Scholarship	\$350	
Cecil Serony Scholarship	\$350	
Louis F. Thompson Scholarship	\$250	
Fraternities		
Gary Holland Scholarship	\$600	
Robert D. Warren Scholarship	\$1,000	
Mary Wilson Scholarship	\$600	
Eunice Davilla Scholarship	\$600	
Dave Bittner Scholarship	\$175	
Leon Kozubal Scholarship	\$150	
Dave Rathkey Scholarship	\$150	
Al Decker Scholarship	\$100	
Timothy M. Miller Scholarship	\$450	
Phi Sigma Pi Scholarship	\$100	
Leon Kozubal Scholarship	125	
Freshman		
Baby Bloomer Scholarship	\$1000	
Benton High School Scholarship	\$1,500	
Board of Governors Basic Fee Waiver Tuition		
BU Association for the Hearing Impaired Scholarship	\$100	
Dominic Murtin Scholarship		\$100
Editha Ent Adams Scholarship		\$100
Enola Snyder Evans Scholarship		\$500
James H. McCormick Scholarship		\$500
Minority Leadership Scholarship		
Mitrani Scholarships (12)		\$1,500
University Scholars Program		\$950
General		
Class of 1941 Scholarship		\$700
Lieutenant Donald Jenkins Scholarship		\$500
Mount Carmel Scholarships (2)		\$250
Student Memorial Scholarship		\$275
Class of 1933 Scholarship		\$400
Ercel D. Bidleman Scholarship		\$300
Kimber Kuster Scholarship		\$300
Class of 1968 Scholarship		\$100
President's Scholarship		\$300
Mary L. Frymire Kirk Scholarship		\$200
APSCURF Scholarship		\$200
Fred G. Smith "Golden Rule Trust Fund" Scholarship		Varies
George and Dorothy Wasdovich Scholarship		\$1,000
Legacy Scholarship		\$250
Margaret Minner Scholarship		\$250
Mary Frymire Kirk Scholarship		\$200
Paul Douglas Teacher Scholarships		\$5,000 max./year
Seth P. Gavason Memorial Scholarship		\$300
Honors Program Scholarship (5)		\$500
James Repella Jenkins Scholarship		\$1,000
Geography		
Bernard and Francis Young Scholarship		\$600
Graduate Program		
Mary Weaver Evans Scholarship		\$250
History		
William A. Turnbach Scholarship		\$1,000
John J. Serff Sr. Memorial Scholarship		\$500
Erma M. Hefferan Scholarship (2)		\$500
Erma H. Hefferan Study Abroad Scholarship		\$100
International Student		
Susquehanna International Folk Dance Association		\$5,000
Languages		
William A. Turnbach Scholarship		\$1,000
Languages and Cultures Scholarship		\$250
Leadership		

Student Leadership Scholarships	\$750
Mathematics/Computer Sciences	
J. Edward Kerlin Scholarship	\$250
Music	
Brenda K. Hafner Memorial Music Scholarship	Varies
Department of Music Service Scholarships	Varies
James R. Hammaker Sr. Memorial Orchestra Scholarship	Varies
Mabel C. Jury Music Scholarship	Varies
Nelson A. Miller Memorial Music Scholarship	Varies
Sylvia H. Cronin Memorial Music Scholarship	Varies
Non-degree Student	
Extended Programs Scholarship (4)	\$250
Non-traditional Student	
APSCUF Scholarship (6)	\$350
Ken Gross Scholarship	\$1,000
Nursing	
Hazleton General Hospital Nursing Scholarship	\$3,086
Helene Robertson Nursing Scholarships (3)	\$700
Columbia County Medical Auxiliary Memorial Scholarship	\$250
Eloise Hippensteel Memorial Scholarship	\$200
Poetry	
Robert Savage Poetry Award	\$100
Political Science	
Robert Rosholt Award	\$50
Professional Studies	
R. Bruce Albert Scholarship	\$300
Boyd F. Buckingham Scholarship	\$300
Psychology	
Ellen Barker Memorial Scholarship	\$250
Sesame Street Scholarship	\$250
Residence Hall	
Elton Hunsinger Scholarship	\$225
Joanne Thomas Memorial Scholarship (2)	\$200
Secondary Education	
Robert Rosholt Award	\$50

Sororities

Rita M. Guerrieri Memorial Scholarship \$450

Special Education

Ginny Thornburgh Award \$475

Veterans

Veterans Memorial Scholarship \$1,000
"Cotton" Franklin V-12 Scholarship \$200

Loans

All students applying for any type of federal student loan must submit either the Free Application for Federal Student Aid or the Federal Renewal Application. Loans are available to both Pennsylvania and out-of-state residents.

General eligibility requirements must be satisfied by all students to receive loan assistance: citizenship or permanent resident of the United States, enrollment or acceptance for enrollment at Bloomsburg on at least a half-time basis (6 credits per semester) and satisfactory progress.

Students cannot be in default of any loan program nor owe any refunds of federal grants. Students in default may have their eligibility restored if they have made satisfactory arrangements with the holder of the loan to repay it.

Entrance interviews are part of the university's standard orientation process for new students.

Exit interviews are conducted during the student's last semester before graduation. Any recipient of a Stafford Loan who is unable to attend a group interview or who leaves Bloomsburg before graduation is required to contact the Financial Aid Office to arrange a personal interview.

Loan repayments are serious financial obligations. Students and their families must understand the commitment being made. Excessive borrowing and failure to repay loans may have serious adverse effects on a student's future financial ratings.

Students experiencing difficulty in meeting their repayment responsibilities must immediately notify their lenders. In certain situations, students may be eligible for deferments (postponements) of the repayment obligation.

Students who borrow from several loan programs may be able to obtain a consolidated loan that combines all loan payments into a single monthly payment. Consolidated monthly payments may be lower than the combination of individual payments, and the repayment

period can usually be extended. Consolidated loans may help students avoid delinquent or default situations. More information regarding loan consolidation is available from PHEAA. The toll-free number for PHEAA is 1-800-338-5000.

For more detailed information about student loans, call PHEAA's toll-free number, 1-800-692-7392. Non-PHEAA out-of-state borrowers may telephone the Federal Student Aid Information Center at 1-800-433-3243 with any questions about the Stafford Loan or any other form of federal student aid.

Perkins Loan recipients must demonstrate a financial need and be enrolled or accepted as degree students. These federal loans range from \$200 to \$2,000 per academic year and are usually packaged with other forms of aid, such as grants and work study. Students who are interested in a Perkins Loan for the summer and who have submitted either the Free Application for Federal Student Aid or the Federal Renewal Application, should schedule an appointment between March 16 and April 22 with the university's Director of Financial Aid.

A Perkins Loan carries a 5 percent simple interest. Repayment starts nine months after students conclude their education.

There are provisions whereby students may be eligible to have the loan canceled over a five-year period; i.e., students who work with the disabled individuals or within a geographic area that is classified by the U.S. Department of Education as a poverty area.

Students must submit either the Free Application for Federal Student Aid or the Federal Renewal Application to PHEAA no later than March 15.

Stafford Loans combine two loans: the subsidized Stafford Loan and the unsubsidized Stafford Loan.

An subsidized Stafford Loan is one on which the federal government pays the interest while the student (borrower) is in college. Eligibility for a subsidized Stafford Loan is based on family income and financial need established by standards set by the federal government.

A unsubsidized Stafford Loan is one on which the student (borrower) is responsible for payment of the interest during the in-college period.

Students can apply for a Stafford Loan from PHEAA or from a participating lender in or near their home community at least 60 days before the date the funds will be needed. Application for loans can be made any time of

the year. If willing to consider a loan, the lender will furnish the student with a Stafford Loan Application.

Interest rates on Stafford Loans are variable. However, interest generally falls in the 7 to 9 percent range. Students should contact their lenders to receive current information on Stafford Loan interest rates.

In addition to the interest charges, students must pay an "origination fee" and "insurance premium" of approximately 4 percent of the amount of the loan. The lender deducts this amount from the value of the loan.

Repayment begins when students either graduate, withdraw or enroll less than half-time (5 credits or less) and have used the allowable grace period - usually six consecutive months.

The monthly repayment amount is set by mutual agreement of the lender and the student. However, the monthly payment amount must be large enough to pay the full loan debt within the 10-year repayment limit. The required minimum monthly payment is \$50. Many students will have payments of more than \$50 per month; others will repay their loan before the 10-year limit.

Persons who borrow money through a loan program assume responsibility for repaying the loan and must notify the lender immediately if circumstances arise that make it difficult to meet this commitment.

Students and their families are entitled to receive a copy of the completed promissory note from the lender. They may also pay the balance of the loan, plus any interest due, early and without a penalty.

Repayment may be deferred up to three years while on active duty with the Peace Corps, or in comparable volunteer programs. Deferments are considered for attendance in "approved" vocational rehabilitation programs, professional internships and disability of the student or a spouse in certain circumstances. During such deferments, the federal government continues interest payments if the loan previously qualified for interest subsidy benefits.

Students are obligated to repay the full amount of the loan even if they do not graduate. If, when repayment begins, students are unable to meet the repayment schedule, i.e., inability to find employment, they may apply to the lender for forbearance to stop payments temporarily or to make smaller payments than scheduled.

Persons borrowing must notify the lender when any of the following conditions arise be-

fore the loan is repaid: graduation, withdrawal from college, attendance is less than half-time (5 credits or less), change of name or address, transfer to another school or other changes that may affect students' eligibility for deferred payments.

The Parent Loan for Undergraduate Students (PLUS) is available to parents of dependent undergraduate students who want to borrow funds to help pay for educational costs. The maximum amount parents may borrow is the difference between cost minus other aid.

Interest rates vary but will not exceed 9 percent. Repayment of both the principal and the interest begins within 60 days after the disbursement of the loan. Parents can acquire the appropriate loan applications from their local lending institutions.

Student Employment

Part-time employment offers a substantial source of additional income to defray college expenses. This work experience may also develop valuable skills needed for future full-time employment.

Students may work a maximum of 20 hours per week at \$4.25 per hour. Pay rates are subject to change without notice in accordance with changes in the Minimum Wage Law. Employment awards may be revised if a student receives additional financial aid that was not considered when the award was made.

Award letters and job placement instructions for the College Work Study Program (CWSP) and State Student Employment programs are mailed in April or May by the Financial Aid Office to applicants who are eligible for on-campus summer employment.

To apply for the CWSP, the State Student Employment Program, and for full-time summer campus jobs, students must submit either a Free Application for Federal Student Aid or a Federal Renewal Application to PHEAA. An application for student employment can be obtained from and must also be submitted to the university's Financial Aid Office by March 15.

The College Work Study Program (CWSP) on campus, which is federally funded, provides jobs for students who have financial need. To apply for CWSP, students must be enrolled for a minimum of 6 credits in a degree program or an eligible certificate program.

The State Student Employment Program on campus is available to students who do not

demonstrate the level of financial need necessary for the CWSP.

The Summer Work-Study Programs on-campus employ students who normally attend Bloomsburg University on a full-time basis.

Off-campus, full-time summer jobs are available through the CWSP to students who have great financial need and who must earn a part of their educational expenses. Students work in non-profit organizations in their home areas and have some preference in job location and job type. Job placement is arranged by PHEAA, which sponsors the program.

Internships are available to students who qualify for off-campus internships at non-profit agencies. Students must apply for the Off-Campus Work-Study Program through Bloomsburg's Financial Aid Office and have approval for federal work study at least 30 days prior to the start of the internship. No student will be paid for an off-campus internship without prior approval from the Financial Aid Office.

Other Financial Aid Programs

Vocational rehabilitation provides training and services for physically or mentally disabled or disabled persons. Students who are enrolled in an educational program may be eligible for financial aid when their disability interferes with their vocational goals. Additional information is available from the Wilkes-Barre District Vocational Rehabilitation Office at (717) 826-2011 or 1-800-634-2060 or (717)-826-2023 (TTY).

Veterans' benefits may be available to veterans of the armed services who qualify for educational assistance under the GI Bill of Rights or the Veterans Educational Assistance Program (VEAP). Contact a local Veterans Administration Office for more information.

The Pennsylvania Army National Guard offers scholarship and loan opportunities. Information is available from a local Army National Guard representative.

Regional awards from students' hometown areas harbor other financial aid opportunities. High school guidance personnel are often very knowledgeable about aid through local sources such as service and fraternal clubs, industry, religious organizations, teachers' associations, foundations, and PTAs.

Since all resources must be considered in awarding financial aid, students who are recipients of awards from other sources must notify the Financial Aid Office of these awards.

Undergraduate Fees for the 1995-96 Academic Year

Fees are subject to change by appropriate governing boards.

	Pennsylvania Resident	Out-of-State Resident
Basic Fee — Tuition (est)	\$1,612	\$4,098
Room and Meal Fee (double room, 19-meal)	1,492	1,492
Academic Equipment Fee (est)	96	96
Community Activities Fee (est)	66	66
Student Union Fee	60	60
Recreation Fee†	60	60
Student Union Operations Fee	25	25
Books and Supplies (estimated)*	500	500
Health Service Fee	37	37
Total Semester (est)	\$3,948	\$6,434
Total Academic Year (est)	\$7,896	\$12,868

Four meal plans are available per semester:
the 10 and 7 meals/week plans are available for
commuters and upper campus residents only

19 meals/week	\$667
14 meals/week	644
10 meals/week	547
7 meals/week	474

*Nursing students will be expected to pay for supplies, equipment and uniforms.
† 4.19 percent increase begins Spring 1996 semester, based upon tuition.

Fees and Some Options

Community Activities Fee finance student activities in athletics, recreation, music, lectures, student publications, general entertainment, student organizations, and other student-supported programs. Part-time students taking coursework on campus are required to pay the Community Activities fee at the rate of \$5.50 per semester hour.

Tuition pays for the actual courses you will take, but does not cover books and supplies. The difference between Pennsylvania and out-of-state resident tuition — about \$3,000 per year — is essentially the financial support of the Commonwealth of Pennsylvania.

For course loads over 18 semester hours, Pennsylvania residents pay an extra \$135 per semester hour and out-of-state residents pay \$342.

Part-time students who are residents of Pennsylvania pay \$135 per semester hour and out of state part-time students pay \$342.

In-state undergraduate students pay \$135 per semester hour for summer session courses. In-state graduate students pay \$179 per semester hour. Out-of-state undergraduate students pay \$322 per semester hour for summer session courses.

For information about graduate student fees, see the Graduate Studies Catalog.

Changes in Fees or Costs

All fees or costs are subject to change without notice. If billing is prior to change, student accounts will be charged or refunded after the fact. Charges for dining hall meals are adjusted annually after the end of the academic year. The adjustment under the food service contract, currently in force, is based on the wholesale price index.

Room and Board includes fees for on-campus, student housing and meal plans at university dining facilities. Several options are available. Fee schedules are the same for Pennsylvania and out-of-state residents.

Housing Fees

Single occupancy dorm	\$1,238/semester
Double occupancy dorm	\$825/semester
Upper campus apartments	\$828/semester
Summer session	\$55/week

Meal Plans

All students who live in the residence halls are required to take their meals in the campus dining hall under one of two food service plans during the academic year. Food service fees are payable with the housing fee as a combined

charge. Housing and food service fees are the same for Pennsylvania residents and out-of-state students. The 14, 10, and seven meal plans apply to any meals served in the dining facilities Monday through Sunday. No changes to meal plans are processed after the second week of the semester. (See the section on *Basic Fees*)

Basic Meal Plans

19 meals/week (\$50 in flex dollars)	\$667/semester
14 meals/week (\$100 in flex dollars)	\$644/semester
<i>Summer Session</i>	
19 meals/week	\$42/week
15 meals/week	\$40/week

In addition to basic meal plans, above, students who live off campus may also select:

10 meals/week (\$50 in flex dollars)	\$547/semester
7 meals/week (\$50 in flex dollars)	\$474/semester

Casual Meal Rate

Breakfast	\$2.70
Lunch/Brunch	\$3.90
Dinner	\$5.00
Steak Dinner	\$7.70
Special Dinner	\$6.50

Arrangements for room guests must be approved by the resident director of the hall where the guest will be housed.

Keys

A \$30 fee is charged for replacing a room key and \$5 for a mailbox key.

Payment of Fees

A nonrefundable **advance registration fee** of \$100 is due when an individual is approved for admission as an undergraduate student or when a former student is approved for readmission. This fee is credited to the first basic fee payment.

The **Community Activities Fee** for one semester is due when a student is approved for admission or when a former student is approved for readmission after being out of school for one or more semesters.

A \$100 **advance housing deposit**, of which \$50 is refundable, is required to reserve a room accommodation and negotiate a housing contract for the academic year. The deposit must be paid prior to room assignment and is cred-

ited to the housing charge for the current semester.

Bank drafts, post office money orders, or checks must be made out for the exact amount of the fee. Fees are payable to Bloomsburg University.

Fees are due at times determined by the Business Office

The university reserves the right to withhold information concerning the record of a student who is in arrears in fees or other charges including student loans.

The university does not offer a time payment plan. Billing statements of student accounts are mailed prior to registration each semester. Failure to comply with the directive concerning payment excludes the student from registration.

Inquiries concerning fees may be addressed to: Director of Accounting, Business Office, 22 Waller Administration Building, Bloomsburg University, 400 E. Second St., Bloomsburg, PA 17815.

Orientation Fees

There is a one-time *administrative* orientation fee of \$20 paid to the Business Office at the initial billing.

A *participatory* fee for the orientation program held on-campus is included with the registration for the program and paid directly to the Orientation Office.

Participatory fee for orientation:

\$52 for fall freshmen
\$10 for January freshmen
\$52 for fall transfer students
\$10 for January transfer students
\$20 for summer freshmen
\$17 for Developmental Instruction students
\$10 for January Developmental Instruction students
\$6 for adult non-traditional students

Miscellaneous Fees

Diploma Fee — A diploma fee of \$10 is charged at graduation for a bachelor's degree or a master's degree.

Transcript Fee — A \$2 fee is charged for each official transcript of a student's record and \$1 for an unofficial transcript.

Late Registration Fee — A late fee of \$10 is charged to a student who completes registration after the official registration date.

Application Fee — A \$25 application fee must be paid by each applicant, undergraduate and graduate, at the time of request for

registration.

Student Community Building Fee — Students are charged a Student Community Building Fee of \$60 per semester for regular sessions, \$3.50 per credit hour for summer sessions (\$42 maximum rate).

Recreation Center Fee — students will be charged a Recreation Center fee of \$60 per semester for regular sessions, \$3.50 per credit hour for summer sessions (\$42 maximum rate). *A 4.19 percent increase beginning in Spring 1996 semester, based on tuition.*

Health Service Fee — All students carrying 9 or more semester hours are assessed a \$37 Health Service fee per semester. Students scheduling 8 semester hours or less will not be assessed a Health Service fee.

Faculty and staff who schedule academic courses are not assessed a Health Service fee. Student teachers and/or students on internships who are not residing in the Bloomsburg area are not liable for this fee; they may request, in writing, an exemption from the Business Office. Students registered in extension courses also are not assessed a health fee. Health services are available only to students who pay a health fee.

All students enrolled in a summer session are assessed \$1 per week for the length of the session(s) for health services.

The monies collected from this fee pay for the health service that has been designated by the Pennsylvania Legislature as an auxiliary function of the institution. These funds are expended for the professional salaries related to health services, plus the cost of the Hospital Emergency Room Fee Waiver Contract and other service contracts, i.e., ambulance service, family planning, medical supplies, utilities, and the self-care unit.

Refund Policies

Application Fee — The application fee (\$25) is not refundable.

Advance Registration Fee — The advance registration fee (\$100) is not refundable.

Basic Fee — Pennsylvania State System of Higher Education fees are established uniformly based upon recommendations of the Board of Governors. Advance deposits credited toward the basic fee are non-refundable. Other amounts paid and credited toward the basic fee are refundable in full for students who withdraw for approved reasons prior to the first class day. Students who reduce their credit hour load so as to qualify for billing as part-time students are eligible for a refund of the

amount paid which exceeds the part-time rate.

Procedures — Tuition fees are eligible for refunds when the student withdraws from the university. All refund requests must be submitted in writing and comply with the appropriate institution's processing procedures. Refunds on student activity fees will be within those regulations and procedures established by the student organization, as approved by the president of the university. Such refunds must be consistent with Federal law. A student is eligible for consideration for a refund for any reason approved by the president or the president's designated official. The refund schedule applies also to all part-time students reducing their credit hour load. Except for minimum forfeiture of advanced deposits, refunds for tuition are based on the following schedule, effective July 1, 1995:

First day	100 percent
First through second week	90 percent
Third through fourth week	50 percent
Fifth through eighth week	25 percent
After the eighth week	no refund

Refund

The university is responsible for notifying each student of its refund policy. Full refund of tuition is granted to students of State System universities who are military reservists or members of the National Guard and are ordered to active military service by the president of the United States. With respect to room and board fees, all refund schedules apply only to conditions in which students withdraw entirely from the university.

The following is the schedule of refunds to aid recipients under Title IV of the Federal Higher Education Act, as amended, who are first-time students at this university, and receiving Federal financial aid:

Time of Withdrawal (16-Week Semester)	Percentage Refund
First Week	90%
Second Week	80%
Third Week	80%
Fourth Week	70%
Fifth Week	60%
Sixth Week	60%
Seventh Week	50%
Eighth Week	40%
Ninth Week	40%
Tenth Week	0%
Eleventh Week and Beyond	No refund

The Commonwealth of Pennsylvania provides approximately \$4,604 per full-time equivalent student to the State System of Higher

Education in support of each student's education.

Community Activities Fee — The Community Activities Fee (\$66) is not refundable.

Other Refund Policies

No refunds are made when students are suspended, dismissed, or voluntarily withdraw from the university. The \$125 housing deposit is not refunded when housing contracts are broken due to voluntary withdrawals from school. Room fees are refunded on the same basis as the basic fees are.

In cases of personal illness that are certified by an attending physician or for other

reasons which may be approved by the university's Council of Trustees, refunds of the housing fee and contingent fees are prorated; the unused portion is subject to refund.

In case of withdrawal, refunds that are due are computed from the date the notice of official withdrawal is received at the Registrar's Office.

Books and Supplies

Books and supplies are estimated at \$170 per semester. Students may secure books and supplies at the University Store. The store operates on a cash basis.

Academic Policies, Practices and Services

Academic Policies

Introduction

Academic policies and practices are subject to change. The policies presented here are authorized as of May 1, 1995. Subsequent changes will be announced in the campus wide information system, student handbook, the *Pilot*; the changes made after publication of the *Pilot* are announced in the student newspaper, *The Voice*.

It is the responsibility of the student to know and observe the academic policies and regulations of the university, to confine registration to courses for which the prerequisites have been satisfied, and to meet the requirements for graduation.

In case of changes by the university in graduation curriculum requirements, degree students who attend without interruption may choose to satisfy either the requirements as they existed at the time of their entrance or the new requirements; if they elect to satisfy the new requirements, they are responsible for them in total.

Definition of Full-time and Part-time Students

An individual who is enrolled for a minimum of 12 semester hours is classified as a full-time student. One who is enrolled for fewer than 12 semester hours is a part-time student. Where the word "student" appears without clarification either by word or context in this document, full-time degree student is implied. Students should be aware that failure to maintain a certain number of semester hours per year may affect eligibility for financial aid, athletics, et al.

Scheduling Classes and Registration

Students enroll by scheduling classes, paying fees, and registering on the first day of each semester or summer session. The scheduling of classes is usually completed during the prior semester. Classes in progress for the current semester always constitute an obligation to the student. All scheduling procedures for the next semester shall not conflict with this obligation. The dates for scheduling and advisement are announced by the registrar. To schedule, students obtain a class schedule booklet, meet with their advisers, and enter their schedules

directly at designated computer terminals.

Seniors schedule classes first, followed by juniors, sophomores, and freshmen. Fall freshmen have their schedules prepared in advance and are provided an opportunity for counseling and schedule changes during the orientation period.

All students should complete English Composition I and II (or equivalent) by the end of the sophomore year.

Students shall not be required to take part in cocurricular activities until after 3:30 p.m. Scheduling activities have precedence over unscheduled meets, practices, etc.

Students off-campus at the time of scheduling due to student teaching, internships, etc., will prepare their proposed schedule, which will be processed at the appointed time with those of their peers. These students mail their class scheduling form to the registrar.

Students are billed according to number of semester hours scheduled. (See Admission, Financial Aid, Fees)

Students must register in person on the first day of each semester or summer session according to the instructions for registration issued by the registrar. Special provisions for registration are available for non-degree students and part-time degree students. Students who do not register will have their class schedules dropped at the end of the first day of registration.

Students with unpaid fees, overdue library materials, and other obligations due the university will be denied scheduling and registration privileges.

Students with disabilities should contact the Office of the Registrar to make special arrangements for scheduling of classes and registration.

Change of Undergraduate Schedule

A student may change his/her semester/summer session schedule prior to the close of the fifth/third day of the semester/summer session. The consent of the adviser is not prerequisite to a change. Changes are subject to available space in classes to which the student proposes to transfer.

Schedule changes for all students in the Department of Developmental Instruction, with less than 32 earned credits, require the approval of the Department of Developmental Instruction. Schedule adjustments for students on academic probation, reinstatement

and minimal academic progress require the approval of the academic adviser.

Late Registration

A student may register late until the close of business on the sixth day of the semester or the first Wednesday following a summer session registration. There is a special fee for late registration unless the student presents a medical excuse at the time of registration.

Semester Hour

A semester hour is ordinarily defined as the credit for one weekly period of 50 minutes in lecture, discussion, or recitation for one semester. In some cases, as in laboratory, studio, or internship, there may not be a one-to-one correspondence between experimental time and credit.

Residence Requirements

At least 32 of the last 64 semester hours credited toward a bachelor's degree must be taken in residence at the university. Former Bloomsburg students who are certified for teaching by completing two or three years of college work and who are candidates for the Bachelor of Science in Education must complete at least one half of the remaining work for the degree program in residence. Residence credit is given for courses by Bloomsburg University for college credit.

Class Standing

A student has academic standing as a freshman until he or she has 31 semester hours, as a sophomore from 32 to 63 semester hours, as a junior from 64 to 95 semester hours, and as senior after 96 or more semester hours of credit. Transfer credit, if any, is included in these figures.

For purposes of social and housing privileges and regulations, the definitions of class standing are as follows: freshman, to and including 29 semester hours; sophomore, 30 to 59 semester hours; junior, 60 to 89 semester hours; senior, 90 or more semester hours or 6 semesters as a full-time student.

Normal Load and Overload

The normal course load of a student in any semester is 16 semester hours. A student in good standing is limited to 18 semester hours, unless he or she receives permission for an overload by his or her academic adviser. A quality point average (QPA) of 3.0 or higher is required of the student before permission can

be granted for an overload. If the QPA is less than 3.0, then approval of the department chairperson is required. (See Admission, Financial Aid, Fees)

A student who is making minimum progress toward academic good standing or who is on academic probation may schedule no more than 16 semester hours. (See the section on Academic Probation) A student who has been reinstated upon appeal of academic dismissal is limited to scheduling 13 semester hours. (See the section on Appeals)

Majors, Minors, Career Concentrations and Teacher Certification

Major — Each student must complete a major field of study for graduation. A major field of study is one of the approved degree programs prescribed by the major department or the college in which the student is enrolled. The specific course requirements for the options within each of the degree programs leading to the degrees are described in the catalog.

Minor — A minor field of study consists of a minimum of 18 hours, at least 15 of which must be in the department offering the minor. While courses counting toward a minor may also fulfill general education or career concentration requirements, minor courses may not be in a student's major discipline and/or certification area. A minor offered in an academic discipline may have multiple advisement options. A student may choose to pursue minors in more than one academic discipline.

Career Concentration — Career concentrations are multidisciplinary advisement programs to help students select courses to develop appropriate skills and knowledge to prepare for entry and mobility in specific professions or careers. For example, career advisory committees exist in areas such as community services, public administration, gerontology and environmental management and planning.

Teacher Certifications — Certification is the result of completing a teacher education program approved by the Pennsylvania Department of Education as defined by Chapter 49 of the Regulations of the State Board of Education — Certification of Professional Personnel. Certificates are issued by the Pennsylvania Department of Education upon the recommendation of the university, based on its approved teacher education programs. Certification does not apply to certificates issued by

the university for completion of a university program. Minors cannot lead to certification to teach or supervise in the public schools of Pennsylvania.

Double Majors Across Colleges

Students electing to major in two departments must have a major adviser in each department, meet all of the major requirements of each department and all of the general education requirements. Double majors in some departments may require more than the minimum 128 credits for graduation.

Pass-Fail Policy

After attaining sophomore standing, a degree student may elect credit courses on a pass-fail basis in accordance with the following rules:

- A maximum of two courses (totaling not more than 8 semester hours) may be included as part of the minimum graduation requirement of 128 semester hours.
- No more than one pass-fail course may be taken in any one semester.
- A student may request to take a course on a pass-fail basis up until the close of the business day on the second Friday of the semester or on the first Wednesday of each summer session.
- Courses taken on a pass-fail basis must be free electives; no required courses may be taken as pass-fail. Required courses are those courses used to satisfy the requisites for a major (including required cognate courses) or a minor or to comply with General Education requirements. The student must complete all course requirements within the General Education area before selecting another course from that area for pass-fail.
- The instructor is not informed that the course is being taken on a pass-fail basis. Grades of A, B, C, D, or E are translated into grades of P or F, with the grade of P recorded for a grade of D or higher and the grade of F recorded for E. Grades of P and F do not enter the computation of a QPA.
- If subsequent to completion of a course on a pass-fail basis the student changes his/her major to one in which the original grade is required, the student may request that the chairperson of the academic department be notified of the

actual letter grade earned.

- A student who has received a grade of E in a course may not take it later on a pass-fail basis.
- A student may revoke a decision to take a course on a pass-fail basis. The revocation must be completed by the close of the business day one week after the middle of the semester. This allows the pass-fail option to be used again.

Auditing of Courses

A full-time student who is enrolled for less than 17 hours of coursework may, with consent of the appropriate dean and subject to fees as stated in the section on Fees, register for one course as an auditor. If the registrant attends at least three-fourths of the regular class meetings, a V will be reported by the instructor, and the course will be entered on the academic record without credit. No assignments are made to an auditor, and no papers or examinations are accepted by the instructor for grading or recording either during the period of enrollment or subsequent thereto. An auditor may not participate in laboratory or studio work if such work is part of the course audited.

A part-time student may register as an auditor subject to the provision that when computing the fee paid by the student, the course audited will be counted the same as if it were taken for credit. Individuals who are not enrolled as students may apply for audit privileges through the dean of the School of Extended Programs. Acceptance depends upon such factors as space in class and educational background.

Credit by Examination

A student may receive a maximum of 64 semester hours of credit by examination or experiential learning. Credit may be awarded for successful completion of institutional examinations and/or approved external examinations.

A student may petition for the privilege of establishing credit in a course or courses listed in the undergraduate catalog through a comprehensive examination instead of through registration and class attendance or through independent study of the course content.

A student may not petition for an examination in a course audited, nor in a course from which a grade has been recorded.

A student must present evidence of equivalent experience if the course involves laboratory or studio work.

The student's petition must be approved in sequence by the department chairperson and the dean of the college.

An examination committee must be appointed by the department chairperson and approved by the dean of the college. Unless the course is an advanced course which is taught by only one member of the faculty, the examination committee must include at least two faculty members.

The examination must cover the course syllabus in a comprehensive manner. Suitable standardized examinations may be used. The examination must be written or, if oral, subject to transcription. Where skill, as in keyboarding or use of applications software, is a course requirement, the written and oral aspects must be supplemented by a demonstration of skill. A copy of the completed approval form must be placed in the student's advisement file and the original forwarded to the Office of the Registrar.

A fee is charged for courses challenged by institutional examination taken for credit, regardless of the number of credits awarded for that course. Upon receipt of approval, this fee is payable at the university Business Office. Evidence of payment must be presented to the department before the examination can be administered.

If the student passes the examination, the grade of "P" is assigned for the course. If he/she fails, no record is made. This course does not count in the student's normal quota of pass-fail courses.

Suitable adaptations of the above procedures may be used to validate transfer courses taken in non-accredited colleges. No fee is charged for examination to validate such credit. Examinations may be based upon the syllabi of the courses taken in the previous institution or, in case the student wishes to establish equivalency with courses in this university, upon the syllabi of courses offered in this institution.

The university recognizes two external examination programs: the College Level Examination Program (CLEP) and the Advanced Placement Program (AP) of the College Board.

Credit by AP Examinations — The university will award credit for AP Exams upon receipt of verification of a score of 3, 4 or 5 by the Office of the Registrar.

Credit by CLEP Examinations — The uni-

versity will award credit for CLEP Examinations upon receipt and verification of a score at or above the 50th percentile by the Office of the Registrar. Minimum scores for awarding credit and the amount of the credit granted can be secured from the Office of the Registrar. CLEP General Examinations must be taken before matriculating to Bloomsburg University. CLEP Subject Examinations may be taken anytime prior to graduation. Acceptance of credit for certain CLEP Examinations is subject to departmental approval.

Credit for Military Experience — Bloomsburg University may award credit for educational experiences of students earned while serving in the armed forces of the United States. The registrar makes a recommendation to the departmental chairperson of the student's major based upon the American Council on Education's Guide to the Evaluation of Educational Experiences in the Armed Forces. Recommendations are made provided the credit applies to the student's degree program. The final decision for granting credit resides with the departmental chairperson. The university will transfer two credits in 05-100 Physical Fitness for completing basic training in the armed forces of the United States.

Graduate Courses in the Senior Year

Seniors needing fewer than 18 semester hours of coursework to satisfy requirements for a baccalaureate degree may, with approval of a department chairperson, apply to the assistant vice president for graduate studies and research in the School of Graduate Studies for permission to supplement undergraduate courses with graduate courses. Credit for graduate courses is awarded upon verification of completion of the student's undergraduate degree.

Class Attendance Policy

Regular classroom attendance is expected of all students. A student will be afforded reasonable assistance by a faculty member when coursework is missed for such reasons as:

- Personal illness,
 - Death or critical illness in the immediate family,
 - Participation in a university-sponsored cocurricular activity. In the latter instance, mutually satisfactory arrangements for assistance must be made by the student when the activity is announced.
- The instructor is not required to provide

make-up examinations or to review class work missed as a result of unauthorized absences.

A faculty member with departmental approval may adopt a reasonable, alternative policy if class members are provided that policy in writing during the first week of classes.

Student Course Requirements and Progress Information

Within the first week of classes each semester, teaching faculty must distribute in writing at least the following information: procedures for determining each letter grade, any relationship of class attendance to the course, any other course requirements, weighted average of requirements for grade computation, and procedures for making up tests or other work missed through excused absence.

Faculty may post student grades providing a student has given written permission; the grades must not identify the student. Using social security numbers or parts of social security numbers is illegal. If grades are posted, each student should be given unique identifier which is not consistent to student names listed in alphabetical order.

At any time during the semester, teaching faculty shall be prepared to inform students of their academic progress should the student request this.

At the end of a semester or summer term, the final grade of each course is recorded on the student's permanent record; a copy of the semester grades is sent to the student at his/her home address or another address designated by the student.

Recording Grades

At the end of a semester or summer session, the final grade for each course is recorded on the student's permanent record; a copy of the semester's grades is sent to the student's home address or another address designated by the student. Midsemester grades of D and E are reported to degree students with 32 and fewer semester hours earned. These grades are not permanently recorded.

Definition of Grades

Grades given at Bloomsburg University are defined as follows:

- A Excellent
- B Above Average
- C Average
- D Minimum Passing Grade
- E Failure

Effective Fall Semester 1996, grades will be

defined and given at Bloomsburg University, with their commensurate quality points, as follows:

A = 4.00	(superior attainment)
A- = 3.67	
B+ = 3.33	(above average attainment)
B = 3.00	
B- = 2.67	
C+ = 2.33	
C = 2.00	(average attainment)
C- = 1.67	
D+ = 1.33	
D = 1.00	(minimum attainment)
E = 0.00	(failure)

The grades given to each student for academic credit at Bloomsburg University are assigned by those faculty who are responsible for the course in which the student is enrolled.

I — Incomplete is a temporary grade given only when an instructor believes a student has been unable to complete course requirements due to circumstances beyond his/her control. Failure of a student to take the final examination or complete other course requirements without prior arrangement with the instructor for a legitimate excuse is not justification for a grade of I.

When an instructor submits a grade of I to the registrar, it must be accompanied by a formal, written plan for the student to complete the course requirements and the appropriate letter grade that would be assigned if the plan were not completed by the student in the time specified. The plan for the student to complete the course requirements shall be prepared by the instructor with the acceptance of the student. Unless specifically stated in the written plan to the contrary, it is assumed that work will be completed prior to the end of the next regular semester. When the plan has been completed by the student, the instructor will recalculate the grade to be assigned for the course and submit this new grade to the registrar according to established procedures.

A request for an extension of time to complete course requirements must be initiated by the student prior to the deadline of the plan on file in the Office of the Registrar. The student must present suitable documentation to the instructor indicating that circumstances above and beyond her/his control persist or new circumstances of that nature have developed. An extension of time will be granted only upon approval of the instructor and the dean of the appropriate college.

P — Passed. This grade is recorded when a student takes a course on a pass-fail basis and

does work which would lead to a grade of D or higher. The grade of P also is recorded when a course is passed by proficiency examination and when a student receives a passing grade in a noncredit course or cocurricular activity such as musical ensembles, theater and forensics.

F — Failed This grade is recorded when a student takes a course on a pass-fail basis and does work which would lead to a grade of E. The grade of F also is recorded when a student receives a failing grade in a noncredit course for a cocurricular activity.

R — Research. This grade is assigned by the instructor only when a student has been unable to complete a research component of a course because the length of time for the research exceeds the end of semester and when a formal plan for completion of the research is filed with the instructor and the chairperson. Provisions for removal of the grade are the same as those for the grade of I. The instructor must submit the grade of R to the registrar along with the formal plan for completion of the research and the grade to be assigned to the student if the research is not completed satisfactorily in the time period stipulated. The plan for the student to complete the research shall be prepared by the instructor with the acceptance of the student. Unless specifically stated in the written plan to the contrary, it is assumed that the work will be completed prior to the end of the next regular semester. When the student has completed the plan, the instructor shall recalculate the grade to be assigned for the course and submit this new grade to the registrar according to established procedures.

V — Audit (See the section on Auditing of Courses)

X — No Grade Reported When this temporary grade is recorded, the provisions for determining academic honors, good standing, minimal progress, and satisfactory progress are not applied until the grade of X is removed.

W — Withdrawn. (See the sections on Course Withdrawal and Withdrawal from the University)

Quality Points

Quality point values are assigned as follows:

Grade Quality Value Points

A	4
B	3
C	2
D	1
E	0

See note on pending revisions above.

Quality Point Average (QPA)

The Quality Point Average (QPA) is computed from the academic record of courses taken at Bloomsburg University in which grades of A through E were earned. The computation is executed by multiplying the number of semester hours for each course by the number of quality points for the grade in the course and adding the products, then dividing the sum obtained in the first step by the total number of semester hours represented by the courses.

A "semester QPA" is computed by including only the courses of a single semester. The "cumulative QPA" is computed by including all courses taken to date at Bloomsburg University. If a course is successfully repeated at another regionally accredited institution of higher education, the credits for a grade of D or E and the quality points for the D at Bloomsburg are deleted from the computation.

Change of Grade

After a grade of A through E has been reported to the Registrar's Office, it may be changed only through the grievance process, to change a temporary grade to a final grade, or to correct a computational or clerical error. A recommendation for change of grade due to a computational or clerical error must be made in writing by the instructor and approved by the department chairperson and the dean of the appropriate college. When a grade of I and R is changed, only the approval of the department chairperson is required.

Course Repeat Policy

A maximum of four courses (not more than 14 semester hours) in which grades of D or E have been recorded may be repeated. The initial grade remains on the transcript and is part of the student's permanent record. Quality points are awarded for the grade of the repeated course only. The grade of the repeated course is part of the permanent record and is used to calculate the student's quality point average. Multiple repeats of the same course are considered as one repeat. A course taken at the university in which a grade of D or E has been earned and repeated at another accredited institution of higher education is included in the permitted maximum number of repeats.

Withdrawal from a Course

Any student except a first semester fresh-

man may drop a course during the schedule change period (the first five days of the semester). When a course is dropped, it is removed from the student's schedule entirely. After the schedule change period and continuing until one week past the middle of the semester, if a student withdraws from a course, a grade of W will be recorded. As a means of notification to the instructor of the intent to withdraw, a student is required to obtain the instructor's signature on a withdrawal form.

No withdrawals will be permitted after the close of the business day one week after the middle day of the semester.

Prior to the last week of classes, in exceptional circumstances and for compelling and justified reasons, the dean of the college in which the course is being taught may waive these restrictions.

A limit of four withdrawals during the degree program shall apply. Withdrawal from the university is an exception.

Withdrawal from the University

A student may withdraw from the university by completing a withdrawal form at the Office of the Registrar, Room 6, Benjamin Franklin Hall. Students withdrawing in absentia must submit a written request to the registrar.

When students withdraw during a semester, the grade of W is recorded for each of the courses on the student's schedule if the withdrawal occurs prior to the beginning of the final examination period. Students may not withdraw during the final examination period.

The effective date of a withdrawal is the date on which the student signs an official withdrawal form in the Office of the Registrar or the date on which the written request is received by the registrar for a student withdrawing in absentia.

Students failing to register for the next semester are classified as withdrawn and must apply for readmission. Nondegree students may continue to register without readmission provided their next registration is within four semesters of their last enrollment.

An individual who discontinues attendance without clearing all obligations to the university waives the right to a transcript and future readmission until all obligations are cleared.

Policies which cover reimbursements are stated in the subsection on Miscellaneous Fees.

In addition to withdrawing from the university, students may be absent for extended periods of time. The categories include:

- Temporary Withdrawal/Leave of Absence

is granted by the Admissions Office after a student completes the withdrawal procedures and when he/she files a temporary withdrawal/leave of absence form with the Admissions Office. (Refer to the section on Temporary Withdrawal/Leave of Absence)

- Clinical Experience absence is authorized by the registrar when a student is participating in the clinical year(s) of the medical technology and radiological technology programs. Students in this category are not charged fees by the university during the time of their clinical experience at a cooperating hospital.
- Study Abroad absence is authorized by the registrar when a student is participating in a university-sanctioned exchange program with a cooperating university abroad. The student may be charged fees in accordance with the agreement with the cooperating university.
- Completing Degree elsewhere absence is authorized by the registrar when a student receives permission from his or her adviser and department chairperson to complete course requirements at an approved institution other than Bloomsburg University.
- Mandatory Leave is recorded by the registrar when a student is required to leave the university due to medical and/or psychological reasons or is suspended.

Evaluation of Undergraduate Transfer Credits

Evaluation of credit earned at other institutions for transfer students is recommended by the Admissions Office with final approval by the department chairperson. Credits for acceptable courses transfer. Grades, quality points and grade point averages do not transfer.

College level courses completed with a grade of C (2.0/4.0) or above from a two-year or four-year institution, accredited by one of the regional accrediting agencies, are usually transferred for a degree student. Courses taken with a grade of less than C (2.0/4.0) will not transfer to Bloomsburg University.

Transfer credit will be deleted if the student subsequently registers for courses which substantially duplicate the content of courses accepted for transfer.

When the substitution of transfer credit for

a required course is in question because the course was taken in an unaccredited institution or because the description of standards of the course are unclear, a student is entitled to an opportunity to validate the course by examination.

Correspondence courses are subject to acceptance to a total that does not exceed 15 semester hours if taken from a college or university accredited by one of the two regional accrediting agencies and acceptable by that institution toward graduation in a baccalaureate degree program.

Courses taken in another institution on a pass-fail basis are acceptable for transfer as free electives if they conform to the conditions for such grades at Bloomsburg University.

A student applying to transfer courses must fulfill the provisions of the sections on residence requirement and graduation requirements.

Credits from other institutions accredited by one of the regional accrediting associations earned by a Bloomsburg degree student will transfer provided approvals are obtained first from the student's adviser and department chairperson. An approval form can be obtained from the registrar. Upon completion of a course, it is the student's responsibility to provide the registrar with an official transcript. Course evaluations by department chairpersons must be secured before the registrar can record courses and credits on the student's academic record.

Evaluation of credit earned at other institutions by transfer students and by readmitted students who earned credit subsequent to their prior enrollment at Bloomsburg is made in the Admissions Office with guidelines provided by a department chairperson, cooperatively established by a college dean. A transfer student is issued an evaluation sheet that stipulates the requirements for graduation which remain to be met. This is subject to revision in the light of subsequent changes in the evaluation of the transcript.

Academic Good Standing

A student whose record at any final grading period shows a cumulative QPA of 2.00 or better is considered in academic good standing. (There are three final grading periods, fall semester, spring semester, and the total summer session.)

Satisfactory Progress

Satisfactory progress is evaluated on the

basis of two criteria:

- A student's ability to earn a minimum of semester hours;
- A student's ability to maintain a minimum QPA at the conclusion of each grading period.

Full-time, continuously enrolled undergraduate degree students, in order to maintain satisfactory progress toward the completion of a degree, must earn a minimum of 24 semester hours in any given 12-month period (including semester hours earned in developmental studies courses).

Part-time undergraduate degree students, in order to maintain satisfactory progress within any 12-month period, must earn half of all semester hours attempted for up to 8 semester hours; two-thirds of all credit hours attempted for 9 or more semester hours.

Note: Hours earned for a repeated undergraduate course are not counted twice.

To maintain satisfactory progress, a student must meet the following minimal requirements:

Total Hours Earned (Includes grades of P and transfer credits)	Cumulative QPA Required for Minimal Progress
1-16 semester hours	1.25-1.99
17-32 semester hours	1.65-1.99
33-48 semester hours	1.85-1.99
49-64 semester hours	1.95-1.99
65 or more semester hours	2.00

A student, while making minimal progress toward academic good standing, may schedule no more than 16 semester hours.

Dean's List

A full-time degree student whose semester QPA is 3.5 or higher in 12 or more semester hours of coursework will be named to the dean's list for that semester. Grades of P or F do not enter the computation of a student's QPA.

Academic Probation

An undergraduate student in one of the following categories is permitted to attend the university on academic probation for one additional final grading period (semester/summer) but limited to 16 semester hours:

- An entering freshman whose QPA at the end of his/her first final grade period is at least 1.00 but less than 1.25;
- A transfer student whose QPA at her/his first final grading period is less than, but within 0.25 of the cumulative QPA

- required for minimal progress;
- A student who has been meeting the requirement for at least two consecutive grading periods immediately prior to a grading period in which his/her cumulative QPA drops below but within 0.1 of the cumulative QPA required for minimal progress;
- A full-time freshman or transfer student who was making minimal progress toward good standing at the end of the second grading period is below but within 0.1 of that required for minimal progress toward good standing;
- A readmitted student who was formerly dismissed for academic deficiency who at the close of the first grading period has not regained minimal academic progress or good standing;
- A full-time student who failed to earn 24 semester hours within one 12-month period;
- A part-time student who failed to earn the minimum number of semester hours as prescribed above within the given semester.

Academic Dismissal

A student who at any final grading period is not in good standing, making minimal progress toward good standing, or qualified to attend for a semester on academic probation is excluded from registration, and his/her record is marked "academic dismissal." A student may be placed on "academic dismissal" without first being placed on academic probation.

A student under "academic dismissal" is ineligible to attend any courses offered for a period of at least one calendar year. Readmission regulations are stated in the section on Readmission.

Students failing to meet the minimal requirements of earned credit hours and/or QPA will be notified by the Office of the Registrar.

Appeals

A student under "academic dismissal" may petition the Academic Review Board for reinstatement. If reinstatement is granted, the conditions of reinstatement are indicated including an enrollment limit of 13 semester hours for a specified period of time. The student's record also is marked "committee reinstated." If the student does not attain good standing or is not making minimal progress toward academic good standing by the end of the period granted by the conditions of reinstatement, he or she is excluded from further registration,

and her/his record is again marked "academic dismissal."

If the student elects to attend the summer sessions immediately following reinstatement for a spring semester dismissal, then the entire summer session is considered the next grading period for which the student must attain minimal progress toward good academic standing or good academic standing.

Petitions to the Academic Review Board must be in writing and must be mailed to the chairperson of the Academic Review Board within 48 hours of receipt of official notification of dismissal.

The Academic Review Board includes the deans of Arts and Sciences, Business, and Professional Studies; director of Admissions, dean of the School of Extended Programs; coordinator of Academic Advisement; registrar; director of the Center for Counseling and Human Development; and a representative of the vice president for student life. At the initiative of either the applicant or the Academic Review Board, the student's adviser may be invited to participate as a voting member in the consideration of the case.

In its evaluation of a petition for reinstatement, the board is charged to consider the degree to which external factors beyond the student's control temporarily prevented optimum academic achievement; the likelihood that these or similar factors would not recur if reinstatement were granted; the likelihood that the student, if reinstated, could complete his or her curriculum successfully within a reasonable extension of the normal four-year period; and an evaluation of the plan for attaining good standing proposed by the student. A decision of the Academic Review Board is final and not subject to review.

Graduation Requirements

Graduation requires the successful completion of at least 128 semester hours to include completion of the curriculum of an approved major program, completion of General Education requirements, and an average of 2.0 in all courses required by the major program and a cumulative QPA of at least a 2.0. The student must make a formal application for graduation at the Office of the Registrar in Ben Franklin Hall by the deadlines announced in the class schedule.

The last 64 semester hours of credit toward graduation must be in courses taken in a four-year, degree-granting institution accredited by one of the regional accrediting associations.

At least 32 of the last 64 semester hours credited toward a baccalaureate degree must be Bloomsburg University courses. Exceptions to this policy will be made only by a college dean with the recommendation of the appropriate department chairperson. All financial obligations to the university must have been cleared.

Honors

The Latin designations summa cum laude, magna cum laude, and cum laude are used to identify honor graduates.

- Graduating seniors having cumulative QPAs between 3.95 and 4.00 are designated summa cum laude.
- All those graduating seniors having cumulative QPAs between 3.75 and 3.94 are designated as magna cum laude.
- All those graduating seniors having cumulative QPAs between 3.50 and 3.74 are designated as cum laude.

Honors for recognition at the commencement ceremony will be as of the last previous semester, while honors for transcripts and diplomas will be as of the end of the final semester.

A student must have completed 48 semester hours in residence at Bloomsburg University in order to be considered for academic honors at commencement.

Multiple Degrees

A student can be awarded only one baccalaureate degree at a time. The degree to be awarded must be selected prior to the last semester. A student completing an additional major in another degree program will have the fact noted on her or his transcript.

Associate Degree

Except as provided otherwise in this section, all of the preceding academic policies and practices apply to the associate degree. With respect to advanced placement, pass-fail, repeating courses, course withdrawal, and residence requirement, the policy is limited to 50 percent of the number of courses or credits indicated.

Academic Examination Policy

- Faculty shall give examinations during the regularly scheduled classes of the semester. The faculty are responsible for determining the length, frequency, form, and content of all examinations within the guidelines listed below. Final examinations shall be given where applicable only during the

designated final examination week after the end of regularly scheduled classes and only at the designated time and place according to the final examination schedule.

- Faculty will distribute in writing the requirements for each course within the first week of each academic term. In these requirements, final examinations shall be worth no less than 20 percent nor more than 40 percent of the course grade. No single exam, paper, project, or assignment shall have greater emphasis than the final examination. As a result of this condition, every course must use at least three evaluations for grading purposes.
- Faculty will give final examinations, which are comprehensive in design, emphasizing subject matter presented over the entire term.
- Faculty will return and/or permit students to review all unit tests, quizzes, and other types of evaluations by the last regularly scheduled class in the term. In order to prevent an excessive build-up in the number of unit tests for each student during the last week of classes, faculty are advised to refrain from testing during that week.
- A final examination schedule shall be prepared by the Office of the Registrar with consultation of the faculty, if necessary, and approved by the provost and vice president for academic affairs. Regularly scheduled final examination periods will be 120 minutes in length. Part of the final examination week will include at least a one-day interval between the last full day of classes and the first day of scheduled examinations. This time will be designated as the reading period.

The following restrictions are imposed on the scheduling of activities during final examination week:

- Faculty are not required to be available to students for conferences during final examination week.
- No examinations will be scheduled during the reading period unless approved by the provost and vice president for academic affairs.
- No extracurricular activities or faculty-administrative activities shall be scheduled except with the consent of the individuals involved.
- The Andruss Library will remain open, and other designated study areas will be made available during the final examination period with expanded hours when possible.
- No student shall be required to take more than two final examinations in one day. If

the student has a scheduling conflict during the final examination period resulting in an excessive number of final examinations scheduled for one day, the following procedure for rescheduling the final examination shall apply and be completed by at least two weeks before the end of regularly scheduled classes. The student should select two of the scheduled examinations to be taken during the designated time according to the following priority of choice:

1. Courses offered by the major department,
2. Additional required courses in the major program,
3. Other courses.

Any exceptions to any of the scheduling restrictions cited above must be made on the basis of the following procedures:

- In case of noncompliance with the provisions of this policy, the student has the recourse of proper grievance procedures as established by the university.
- During summer sessions, the last class period of each course shall be designated as the final examination period with the time period for the examination not to exceed 80 minutes unless the arrangements have been made in advance so that they can be announced at the first meeting of the class. Except in unusual circumstances, classes in six-week sessions shall have the final examination on the last day of the course. Final examinations for courses scheduled in three-week sessions shall be held during the last of the two class periods scheduled for the last day. Classes in the nine-week sessions shall hold final examinations on the last scheduled class day with the period extended to 80 minutes for that class.
- Faculty who wish to schedule quizzes, tests, or examinations at times other than during their regularly scheduled class periods during the term may do so only if a make-up opportunity is made available to students. This opportunity must be scheduled at a time mutually acceptable to both student and faculty and may not conflict with the student's other scheduled classes. A faculty member shall not give an examination at a time other than during a regularly scheduled class period unless approval is first obtained from the majority of the faculty members of his/her academic department. Except for abnormal circumstances, this approval should be granted by the end of the first week of classes. Notifica-

tion of this alternative arrangement shall be given to the appropriate college dean.

- A faculty member who believes that the content of her or his course does not lend itself to a scheduled examination must obtain approval for an alternative arrangement from the majority of the members of his or her academic department and college dean. Notification of the approved arrangement shall be given to the Office of the Registrar. Except for abnormal circumstances, the approval and notification shall be made by the end of the first week of classes.
- To change the requirement specifying that final examinations shall be worth no less than 20 percent nor more than 40 percent of the course grade, there must be agreement for the change by the faculty member(s) in charge of the class, a majority of the members of his or her academic department, and the appropriate college dean. Except for abnormal circumstances, the approval and notification to students will be made by the end of the first week of classes. If approved, the change may remain in effect for the faculty member for the duration of this policy or until the course is resubmitted to the curriculum committee.
- In order to change the time and place scheduled for a final examination, there must be agreement for the change by the faculty members(s) in charge of the class, 100 percent of the students in the class, and the appropriate college dean. This change must be made by the middle of the semester. Student opinion in this matter will be determined by secret ballot with the faculty member in charge of the vote. If for some reason a change is made in the time and date of a final examination that results in a student conflict, the faculty member will arrange to provide a make-up opportunity during the examination period.
- The additional final examination(s) should be rescheduled with consultation of the relevant faculty on a mutually convenient time. Assistance in the rescheduling of examinations may come from such individuals as the student's adviser, department chairperson, or academic dean.
- Unless returned to the student, all graded final examinations must be available for student review for at least the next full semester following the final examination.

Academic Integrity Policy and Procedures

Bloomsburg University students are expected to be honest in all their academic work; this means they will not engage in any of the following acts:

- Cheating on examinations including nonauthorized use of books or notes, use of crib sheets, copying from other student's papers, exchanging information with another student orally or by signals, obtaining a copy of the examination illegally, and other similar activities.
- Plagiarism in term papers, themes, essays, reports, take-home examinations, etc. (To plagiarize is to steal or use without acknowledgment the ideas, words, formulas, computer programs, etc. of another person.)
- Falsifications including forging signatures, altering answers after they have been graded, insertion of answers after the fact, erasure of a grader's marking, etc.

A student found guilty of academic dishonesty may be subjected to a full range of penalties from reprimand to expulsion from the university.

A faculty member who believes that a student has violated the academic integrity policy should use the following procedures to resolve the matter.

- Reprimand the student orally or in writing. A faculty member also is authorized to assign a zero in the work tainted by the academic dishonesty and/or assign the grade of E for the entire course (A student may file a grievance against this action.); and/or
- File a written complaint against the student with the Student-Faculty Judicial Board. The complaint must describe academic dishonesty that is alleged to have taken place and must request that the matter be shared by the board.

All subsequent procedures shall follow those of the judicial system.

Change of Area of Study (Major)

A student who wishes to change from one area of study to another must file a request to do so in the Office of Academic Advisement.

Permission to enter the new area of study may require the written approval of the department chairperson in which it is offered. In this case, approval may depend upon such factors as overall grade point average, available space, and recommendations from departmental

committees. It also must be done by the student and while school is in session.

Diagnostic Testing Program Policy

This policy applies to testing that is not a part of the admissions procedure or course requirements. The coordinator of academic advisement uses diagnostic test results to assist with course placement.

Students will be selected for diagnostic testing based upon their predicted freshman year grade point average or performance in courses at Bloomsburg University. A predicted freshman year QPA is calculated for each new freshman at the time of application to the university. New students with a predicted QPA less than 2.5 will be given diagnostic test(s). Students whose college QPA falls below 2.0 will be considered for diagnostic testing based upon their circumstances. The specific area(s) of diagnostic testing will be determined by the pattern of SAT scores and either high school or college achievement. Students selectively low in one of the admission testing areas (e.g., below SAT math of 450 or SAT verbal of 430) will have diagnostic testing in areas which are selectively weak.

Results of these tests will be released to faculty and staff on a need-to-know basis only for diagnostic evaluation and remediation of the individual tested and/or evaluation of the testing program. This information will be released with appropriate interpretation to students and to other agencies as the student permits. These data may be released without student permission for research purposes with student anonymity assured.

Depending on the results of the review of the record and the diagnostic evaluation, an individual program may be provided.

If a student is identified and placed in a developmental course(s), the course(s) is considered a prerequisite before additional courses for credit can be taken in the corresponding area. Each student will be provided with a letter indicating course placement or the recommended resources available to assist them, such as tutorial services, tutorial labs, and the College Study Skills courses. Such developmental programs will be provided for a maximum of students within the budgetary limits of the university.

Student Outcomes Assessment

The university is committed to the continuous improvement of its programs and services. In an on-going effort to monitor the qual-

ty and effectiveness of these programs and services, the university routinely conducts campus-based studies of student attitudes, student achievement, student satisfaction, and personal, professional and career development. These studies are grouped under the heading of student outcomes assessment. Participation in outcomes assessment activities is expected of all students. While every student is not selected for participation in every activity, it is likely that an individual student will be involved in one or more assessment activities during the college years. It is only through cooperative participation in the assessment process that the university can better understand itself and better serve its students.

Academic Support Services

Academic Support Services encompasses Academic Advisement, Tutorial/504 Services, International Education, the Department of Developmental Instruction, Act 101/EOP and Upward Bound. The freshman year program and the university seminar course for new students are under the direction of Academic Support Services. Additional responsibilities include management of the university's performing arts facilities and leadership for the Celebrity Artist Series, Provost's Lecture Series and the Community Arts Council.

The goals of this area are to provide academic services and courses of study which enable students to achieve academic success and to broaden the entire university community's cultural and intellectual horizons by bringing acclaimed performing artists, ensembles and lecturers to campus.

Academic Advisement

Incoming students, who indicate and are offered admission to their preferred curriculum, are assigned to faculty advisers who specialize in advisement in these areas. Assignments to advisers are made by the coordinator of academic advisement with advice of department chairpersons and deans.

Applicants for admission who are undecided about their curriculum state undeclared on the application instead of specifying a curriculum. These applicants are considered general studies students and will declare a specific major at the appropriate time. These students are advised or assigned to advisers by the coordinator for academic advisement.

Students with questions or problems should seek assistance from the Office of Academic Advisement, 12 Benjamin Franklin Hall, (717)

389-4271.

Tutorial/504 Services

The Office of Tutorial/504 Services offers a wide range of services designed to support and enhance the performance of university students. Peer tutoring is available upon request in a variety of courses and is provided by students who have distinguished themselves by superior academic performance. Any student wanting tutorial service needs only to complete a brief application in order to obtain this free service.

Services available through the 504 function seek to assist those students who bring special needs to the university. Interpreters, note-takers, and readers are just a few examples of the services available.

The office also serves as an advocate on issues of accommodation beyond the classroom and acts as liaison with various other campus offices. The office regularly contacts the state offices of Vocational Rehabilitation and Visual Services to ensure that students are receiving adequate support from both the university and other agencies. Candidates for admission to the university are encouraged to contact the office in conjunction with a visit to the Office of Admissions. The Office of Tutorial/504 Services is interested in providing prospective students with a clear and comprehensive discussion of what will be available to them should they decide to enroll at the university.

International Education

The international education program advises international students and coordinates university-wide efforts to provide study, research, and teaching abroad opportunities for students and faculty. Participants experience a gamut of new cultural experiences that inspire fresh perspectives on various relationships. Opportunities are provided to study for a semester, an academic year, or a summer at a foreign institution. In recent years, Bloomsburg students have spent part of their undergraduate years in Scotland, England, Ireland, The Netherlands, France, Germany, Italy, Austria, Russia, Spain, Nigeria, Mexico, Ecuador, Brazil, Japan, China, and India.

Education majors have the opportunity to complete their student teaching in a foreign country, while adding an international dimension to their professional development.

The Office of International Education is located in Lower Luzerne Residence Hall.

Upward Bound

The university presents the opportunity for eighth, ninth, and tenth graders from affiliated high schools to enroll in its Upward Bound program. Participation may continue through the summer after high school graduation. The program, open to students meeting certain academic and financial requirements, is geared to promote self-confidence and to make students better informed and, thus, better prepared for life beyond high school. Upward Bound's ultimate goal for its students is completion of higher education.

The program consists of two parts. In the first segment, students spend two hours a week at their own high schools involved in academic experiences which supplement their regular scholastic program and improve their academic performance. The program's counseling service provides close individual contact for discussing career, vocational, and personal interests within the high school setting. The second component of Upward Bound is a six-week summer residential experience on the Bloomsburg University campus. This segment provides concentrated academic work plus planned recreational, social, and cultural experiences, both on and off the campus.

Freshman Year Program

The freshman year program provides many services to new students during the academic year. Freshmen in need of academic assistance may contact the Office of the Dean of Academ-

ic Support Services located in lower Luzerne Hall.

A one-credit elective university seminar course, 09.100 University Seminar, is offered on an on-going basis, is designed to assist freshmen in making a smooth transition to their college experience.

Celebrity Artist Series

Numerous diverse cultural attractions are brought to the university campus each year. The Celebrity Artist Series features notable performing artists and groups — symphony orchestras, musical troupes, dance companies, and popular personalities. The series is sponsored by the Community Arts Council, which is comprised equally of faculty members, students, and community representatives. Faculty, staff, and students who have paid a Community Activities fee are provided seating on a limited basis. A subscription plan is available for preferred seating and may be obtained from the Office of Academic Support Services located in lower Luzerne Hall.

Provost's Lecture Series

The Provost's Lecture Series provides a public forum for the university, as well as surrounding communities, to share the fruits of learning. Scholars, executives, journalists, and professionals from various walks of life are invited to campus to speak about academic issues and special topics of interest. Faculty members often encourage students to attend events related to their discipline. The events are free and open to the public.

Student Life and Services

Student Housing

Students are responsible for understanding and abiding by the university's rules, policies, and regulations as stated in university publications, the Undergraduate Catalog, the Residence Hall Handbook, the Montgomery Place Apartments Handbook and in the student publication, the Pilot.

Student Life services include housing, food and health services, institutional testing, and a variety of programs and activities to enhance personal growth and development, academically, emotionally, and socially.

On-Campus Housing

Seven residence halls and an apartment complex accommodate a total of 2,680 students. Each of these is described in the section on Buildings and Facilities.

Although students' housing preferences are considered whenever possible, the university reserves the right to alter the composition of residence halls.

Housing and food services are provided on a combined basis only for students living in the residence halls. Students living in the Montgomery Place Apartments have the option of a meal plan. Housing and food service agreements are binding for a specified period and may not be transferred or reassigned.

Freshmen under 21 years of age must live on campus or commute from their parent's residence. If extenuating circumstances justify other housing arrangements, a written request for waiver of this residency requirement must be submitted to the director of Residence Life, ground floor, Elwell Residence Hall, Bloomsburg University, Bloomsburg, PA 17815.

Transfer students, upon acceptance to the university and payment of the advance deposit, are eligible for on-campus housing on a space available basis, but married students and/or students with families whose housing needs are atypical are not eligible.

Students must participate in an assignment process for housing on upper and lower campus to reserve a room for the following academic year. Eligibility requirements are subject to revision in response to fluctuations in enrollment figures and student demand for on-campus accommodations.

Further information concerning on-cam-

pus or off-campus housing may be obtained by contacting the Residence Life Office at (717) 389-4089.

Off -Campus Residency

All off-campus residences are privately owned and operated and are considered "independent" student housing. The university does not approve or recommend residences.

Students must rely on their own initiative to find suitable accommodations because the university does not assign students to off-campus residences and negotiations are the sole responsibility of students and their landlords.

Students planning to live off campus should have a clear understanding of their rights and responsibilities as tenants. Copies of model leases, apartment inventory checklists, departure notices, and town street maps are available to students through the Residence Life office. Off-campus students are advised to obtain insurance coverage for their belongings since most landlords do not assume liability for the loss of, or damage to, their tenants' personal property.

Students residing off-campus bear a dual responsibility as citizens of the Town of Bloomsburg and as members of the university community. The university cannot provide sanctuary from the law nor can it be indifferent to its reputation in the community it serves.

Student Organizations

Community Government Association

All full-time and part-time undergraduate students who have paid the Community Activities Fee are members of the Community Government Association (CGA). Graduate students, faculty, and staff members who have paid a Community Activities Fee also are members. Student Senate meetings are held every other Monday evening. The executive council, which consists of the officers and two senators, meets on alternate Monday evenings.

Student Organizations and Activities

The university encourages students to participate in at least one extracurricular activity each semester, and there are more than 150 campus organizations designed to meet a wide range of interests. As of May, 1995, these include:

Accounting Club

Adult Health Majors Club	French Club (Le Cercle Francais)
Alpha Epsilon Rho	Freshman Class
American Chemical Society	Frontiers Frontline
American Marketing Association	Global Awareness Society
Anthropology Club	Graduate Student Council
Army ROTC	Habitat for Humanity
Association for Childhood Education International	H.A.B.L.A.S.
Association of Hispanic Students	Hillel (Jewish Fellowship)
Association of Public Relations Students (APRS)	H.O.P.E (Helping Our Planet Earth)
Bangladeshi Student Association	Husky Ambassadors
Bicycle Club	Husky Singers
Black Cultural Society	Ice Hockey
Bloomsburg Association of Hearing Impaired	Image
Bloomsburg Fencing Club	Intercollegiate Bowling Club
Bloomsburg Literary Journal	International Relations Club
Bloomsburg Players	Inter-Varsity Christian Fellowship
Bloomsburg Student Concert Committee	Junior Class
Bloomsburg University Billiard Club	Kappa Gamma Iota (Veterans)
Bloomsburg University Chamber Singers	Kappa Phi Club
Bloomsburg University Gospel Choir	Kehr Union Program Board
BU Advertising Club	Luzerne Residence Hall Council
BU Volleyball Club	Lycoming Residence Hall Council
Campus Child Center Parent Association	Management Club
Catholic Campus Ministry	Maroon and Gold Band
Cheerleaders	Math Club
Chess Club	MBA Club
Chinese Student Association	Men's Lacrosse Club
Christian Student Fellowship	Men's Rugby Club
Circle K Club (Omega Tau Epsilon)	Montgomery Place Apartments Council
Club of Biological Sciences	Montour Residence Hall Council
Coalition of Minority Organizations	Music Educators National Conference
College Republicans	National Student Speech, Hearing, and Language Association
Columbia Residence Hall Council	Northumberland Residence Hall Council
Community Arts Council	Obiter (Yearbook)
Community Government Association (CGA)	Oriental Language and Culture Club
Commuters and Returning Students (CARS)	Phi Beta Lambda (Nu Omicron Chapter)
Concert Choir	Philosophy Club
Criminal Justice Society	Planning Students Association
Data Processing Management Association	Pocket Billiard Club
Earth Science Club	Political Science Student Association
Elwell Residence Hall Council	Pre-Law Club
English Club of Bloomsburg University	Protestant Campus Ministry
Equestrian Club	Psychology Association
European Student Association	Role Playing Guild
Exercise Science Club	Rotaract Club
Fellowship Among Christians Through Service (FACTS)	Russian Club
Fellowship of Christian Athletes	Schuylkill Residence Hall Council
FEM	Senior Class
Finance Club	S.H.A.R.E.(Students Helping Adolescents Reach Excellence)
Forensic Society	SIGNIFY (Sign Language)
Free Spirit	Ski Club
	Society for Human Resource Management

Society of Physics Students
 Society of Professional Journalists
 Sophomore Class
 Speech Communication Association of Pennsylvania (SCAP)
 START (Students Together Alleviating Racial Tension)
 Student Art Association
 Student Council for Exceptional Children (Alpha Chapter #370)
 Student Nurses Association
 Student PSEA (Student Pennsylvania State Education Association)
 Students of the Social Welfare Club
 Student Trainers Association
 Studio Band
 2-5-8 Communicate!
 Ultimate Frisbee Club
 University Amateur Radio Club
 University-Community Orchestra
 University Democrats
 Upward Bound Alumni Association
 Urban Education Association (Cultural Diversity)
 Vegetarian Society
Voice, The (Newspaper)
 Volunteer Services: Student NASY
 Water Polo Club
 WBUQ – campus radio stations
 Women's Choral Ensemble
 Women's Rugby
 Zusammen in Deutsch

Social Fraternities and Sororities

The Inter-Fraternity Council (IFC) serves as the governing body of eight recognized social fraternities at Bloomsburg. It helps to coordinate rushing, pledging and all Greek intramural games. Working with the National Panhellenic Council (NPC), the IFC sponsors activities for the entire campus community. It fosters leadership, scholarship, friendship, diversity and community service through the true bonds of brotherhood. Members of the IFC are: Alpha Chi Rho, Beta Sigma Delta, Delta Kappa Epsilon, Lambda Sigma Upsilon, Phi Sigma Xi, Pi Kappa Phi, Sigma Iota Omega and Theta Chi.

The National Panhellenic Council of Bloomsburg (NPC) is composed of representatives from 11 of the recognized social sororities. It serves as their governing body and works to coordinate rush, pledging activities and endeavors to enhance friendships among the Greek women. It fosters leadership, scholarship, friendship, diversity and community service through the true bonds of sisterhood.

Working together with the Inter-Fraternity Council, the NPC helps to program activities open to the entire campus community. Members of the National Panhellenic Council at Bloomsburg are: Alpha Sigma Alpha, Alpha Sigma Tau, Chi Theta Pi, Chi Upsilon Sigma, Delta Epsilon Beta, Delta Phi Epsilon, Delta Sigma Theta, Phi Iota Chi, Phi Sigma Sigma, Sigma Sigma Sigma and Theta Tau Omega.

For more information on the social fraternities and sororities at Bloomsburg, contact the coordinator of greek affairs at (717) 389-4898.

Publications

Students interested in journalism may join the staffs of student publications. Through these activities, students contribute to campus life and gain valuable experience for future work in either commercial or school journalism.

The Voice, the university's student newspaper, is published weekly, funded by the Community Government Association (CGA) and distributed free throughout the university community. Students write, edit and layout the newspaper.

The Obiter is the annual yearbook and pictorial of activities and highlights at Bloomsburg University. It is funded by the C.G.A. and is distributed free to members of the senior class upon graduation. Other members of the university community may purchase copies at the University Store.

The Bloomsburg Literary Journal provides students and faculty with an outlet for creative work and is distributed during spring semester.

The Pilot, the student handbook, is edited under the supervision of the director of student activities/Kehr Union and is funded by CGA. The Pilot contains essential information about requirements, procedures, and policies established by the university.

Honor and Professional Societies

National honor and professional societies foster educational ideas through scholarship, social activities, and moral development.

Alpha Psi Omega	Phi Sigma Pi
Beta Beta Beta	Pi Kappa Delta
Delta Mu Delta	Pi Omega Pi
Kappa Delta Pi	Psi Chi
Kappa Mu Epsilon	Sigma Tau Delta
Omicron Delta Epsilon	Tau Beta Sigma
Phi Kappa Phi	

Kehr Union

Marguerite W. Kehr Union is a predominantly student-governed and operated facility to enhance student life outside the classroom and to serve as a meeting place for all members of the university community.

Committed to diversity, Kehr Union serves as a forum for programs presented by student, academic, and outside organizations. Through the Kehr Union Program Board, the union provides diversified programs of educational and entertainment value for the entire campus.

The union provides facilities for many services including a large food court and houses the Health Center and the Career Development and Placement Center. Also located in the union are the Information Desk, Community Activities Office, Student Activities Office, as well as many student offices such as Community Government Association, Obiter, Voice, and Black Cultural Society.

Multicultural Center

The Multicultural Center provides an additional forum for total education of the Bloomsburg University Campus. The center sponsors/co-sponsors programs and activities that focus on the contributions of those Americans who represent diverse cultures at Bloomsburg University and may serve as a central coordinating center for programming.

Student Recreation Center

The Student Recreation Center is located on Swisher Circle above the tennis courts. This facility, opened in 1995, covers 56,000 square feet and is fully funded through a self-assessed student recreation fee. Major features include an exercise room with step machines, rowing machines, Cybex equipment and treadmills. The main area has four intramural-size basketball courts, which can be used for volleyball and tennis. The room is circled by the one-eighth mile jogging track that goes by the south wall of eight-foot high panels of glass with a view of Catawissa mountain and surrounding areas. Also in the center are the free weight room with mirrors on the north wall, multi-purpose room for aerobics and dance, and four glass-backed racquetball courts that are adaptable for wallyball.

Dining Facilities

William W. Scranton Commons has a seating capacity of 1,265. A variety of dining ser-

vices are furnished by a professional food service vendor, providing a broad array of menu options. Students participate in dietary planning. A registered dietician is on staff to assist students with special dietary needs and counseling. The commons offers an exciting "non-traditional" style of dining with five self-service food stations as well as line service that offers student four different entrees daily, including a vegetarian menu selection. Dining services also include a popular pizza shop (Itza Pizza), a convenience store (Husky Trail), a food court in Kehr Union (Husky Lounge) and a delicatessen-style facility on the upper campus (Monty's).

Group meals, available to campus organizations, may be arranged through Classic Faire Catering subject to approval of the Residence Life Office and the Business Office one week in advance of the event. Banquets and parties for outside groups may be reserved through the same procedure 30 days in advance. Our facilities allow us the flexibility to accommodate groups up to 500 people.

Meal Plan Options and Flex Dollars

All students living in campus residence halls are required to purchase a meal plan. Students who live off-campus or in the Montgomery Place Apartments have the option of purchasing a meal plan at the Business Office in Waller Administration Building.

The meal plan provides a cash equivalency option which allows students to purchase a certain dollar amount at each meal in the various food facilities on campus including the pizza shop and snack bar. After making a selection, the cash price of the meal is totaled. If the cost is under the prescribed amount, there is no charge. If it exceeds this amount, the difference must be paid in cash or in flex dollars. One cash equivalency meal equals one board meal.

Flex dollars, which are part of the meal plan and may be purchased separately by students living off-campus or in the Montgomery Place Apartments, broaden a student's options. These dollars can be used at any food facility. Each time a student uses flex dollars, the expenditure is subtracted from the balance of the student's flex account. Students living in the residence halls can add to their flex account in increments of \$25. Students living off-campus and in the Montgomery Place Apartments can purchase flex dollars at the Business Office in \$25 increments once they have made an initial minimum deposit of \$100 into their

flex account.

The flex balance carries over from fall to spring semester only. Any balance left at the end of the spring semester is not refundable and cannot be transferred. Students may, however, purchase gift certificates with the balance of their flex accounts; valid until the following October. These gift certificates are honored at all campus dining facilities. Students should use all monies in flex accounts.

Health Services

The Student Health Services Center, on the 300 level of the Kehr Union Building, provides care for minor injuries and illnesses. Students requesting an appointment should call 389-4451 during posted hours. For answers to medical questions, or advice about health problems, call the Triage Nurse at 389-3800. In the event of an emergency and the health Center is closed, students should report directly to The Bloomsburg Hospital Emergency Room. Students must show their current Bloomsburg University I.D. card to the emergency staff when seeking treatment at the hospital to have the emergency room fee waived.

The Student Health Center is staffed by registered nurses, nurse practitioners, and part-time physicians. Nurses refer students to the nurse practitioner and part-time physicians as appropriate. Professional services received at the center are covered by the health service fee and provided free to students. Laboratory tests will be charged to insurance companies. Costs for medical services received at The Bloomsburg Hospital (with the exception of the emergency room fee) will be paid by the patient or the patient's insurance. As part of an effort to provide improved services for students, the Health Center announces any changes in the school newspaper and provides information in brochures.

Absence Due to Illness — A student who misses class because of an illness must contact his/her professor as soon as possible in order that an understanding can be reached between professor and student. In cases of prolonged illness, for which strict bedrest and/or hospitalization is required, the Health Center will contact all concerned faculty.

Ambulance Service — Service to The Bloomsburg Hospital is paid for by the Student Health Center and is available to all students of the university while living on or off campus, in the service area provided by The Bloomsburg Ambulance Association at 911 for ambulance

service. A student whose injury or accident is self-induced must pay for the ambulance.

Family Planning — The Family Health Center, located in Bloomsburg, offers services for gynecological exams, contraception, pregnancy testing, and counseling at a reduced fee through an agreement with Student Health Center. Sexually transmitted disease screening and treatment is provided free through provisions from a state contract. All visits are scheduled by appointment and all services are confidential. Appointments can be obtained by calling Family Health Center, 2201 Fifth Street Hollow Road, Bloomsburg, from 9:00 a.m. to 5:00 p.m., Monday, Wednesday, Thursday, and Friday, and from 9:00 a.m. to 9:00 p.m. on Tuesday, at (717) 387-0236.

Student Health Insurance

The university currently requires, in addition to the health service fee, that all full-time students with nine (9) or more credits and all international students have appropriate accident and sickness insurance coverage. Students currently covered by an insurance plan of their parents, guardian, or spouse must provide the Health Center with complete insurance information including name of insurance company, complete address, and all policy and group numbers. Any change in insurance coverage should be reported immediately to the Health Center.

Students who do not have current insurance may purchase the current student health insurance or another plan of their choice. The student health insurance plan meets the needs of the individual at the least possible cost, balancing necessary coverage with the student's ability to pay. Students should carefully review this plan to determine if it adequately meets their health care needs. Filing of claims is solely the responsibility of the student. All questions concerning claims and coverage should be referred directly to the company. A toll-free number is provided by the company. An application is included along with registration materials or can be obtained at the Health Center.

Insurance Coverage for Athletics — All students participating in intercollegiate sports must have their own primary insurance coverage. The Community Government Association provides a policy that acts as supplement to the student's own.

The basic benefits, under the athletic insurance program, are provided on an excess basis. This means the expenses will be submit-

ted to the parent's medical insurance plan prior to any payment or consideration by the university's company. Injuries requiring less than \$100 of medical expenses will be covered by the university's plan and need not be submitted to the parent's medical plan. The maximum benefit for injury to sound natural teeth is \$200 per tooth. Damage to temporary teeth (bridge, partial, etc.) is not covered.

In addition to the basic benefit plan, which covers up to \$25,000 in related expenses, all student-athletes are covered under a Lifetime Catastrophic Insurance Plan. Under this plan, benefits would be payable for life with no limit on the total dollar amount, on expenses incurred for hospital care, surgical services, extended care facilities, and rehabilitation services.

Insurance coverage offered to students is based on negotiated contracts and is subject to change.

Insurance Coverage for Intramural Sports

—The Bloomsburg University Intramural Program is completely voluntary and participation solely determined by free choice of each participant. The university is not responsible for injuries during intramural activities. Participants must have a satisfactory health status and appropriate personal accident insurance coverage for any injury that might occur during participation in the intramural program.

Center for Counseling and Human Development

The Center for Counseling and Human Development (Counseling Center) provides counseling services to students to deal with personal or academic problems through individual and group counseling formats. Some of these areas include: study skills, time management, academic concern, assertiveness and effective communication, homesickness, issues related to racism, sexism, homophobia and other "isms," human sexuality, substance abuse (drugs and/or alcohol), adult children of alcoholics, surviving rape, incest, assault and sexual assault, eating disorders, depression, suicide, self-esteem and many other situations which relate to daily living.

Specialized counseling is provided for students participating in Act 101 and Educational Opportunity Programs. In addition to individual and group counseling, counselors present outreach workshops, presentations, and seminars, upon request, in classes, residence halls, and other campus settings. Other services include professional consultation con-

cerning students to faculty and staff.

All Counseling Center services are free and confidential. Release of any information to other persons and agencies is only undertaken with consent of the student, except as provided for by state or federal law and professional ethics.

Located in 17 Benjamin Franklin Hall, the center is open weekdays from 8:00 a.m. to 4:30 p.m. Counselors are available during regularly scheduled class days. After-hour emergency contact with a counselor can be made during each semester by calling the office answering machine service, (717) 389-4255. For appointments or additional information about counseling services, call (717) 389-4255.

Institutional Testing

Specific state and national tests for special purposes are administered by the coordinator of testing upon request as a service to the Bloomsburg University community. Special requests should be made to the coordinator by calling (717) 389-4678.

Tests such as the GRE, GMAT, MAT, NTE, NLN Mobility II, and CLEP are administered on campus on a regular basis. Applications for these tests are available at the testing office located in Room 15, Benjamin Franklin Hall. For more information, contact the center.

Orientation

Orientation involves educating students with regard to academic, personal and social issues important for student achievement and success. The goal is to begin to expose students to a well-balanced university experience. Orientation also provides for initial contacts with faculty in the academic advisement process through the scheduling of classes and familiarizes students with university policies, procedures and practices. Social activities are planned so that students can begin to meet people and form friendships. Upperclass students are involved in the entire orientation process to serve as role models and resource persons for new students. Through programs and meetings, every effort is made to ensure a successful transition for freshmen and transfer students.

The university requires a comprehensive orientation program for all newly-admitted degree students. Freshmen and transfer students beginning classes in the fall semester participate in a two part orientation. Each student is invited to campus for one day in July to take care of academic matters such as scheduling and advising. In addition, students receive a cam-

pus tour and take part in student life programming. Families of students receive a special orientation designed to meet their needs on the same day.

Part two of orientation takes place in August, four days prior to the start of classes. In part two, students attend a variety of workshops designed to help them become familiar with library services, electronic registration, schedule changes and housing and student life. In support of Bloomsburg's commitment to promoting positive human relations among people in our community, all students participate in a diversity training session conducted by university faculty, staff, upperclassmen and townspeople. A highlight of August orientation is the student convocation, during which students are officially welcomed to the university by the president, faculty and staff.

Summer freshmen receive their orientation on the day they move into residence halls. In addition, summer freshmen attend orientation programs throughout the nine weeks of summer classes. Students admitted for the spring semester receive orientation in January when they arrive on campus.

Commuter students are required to attend orientation because of the importance of academic testing, scheduling and advising. Orientation is an opportunity for commuter students to feel welcome and connected to campus. The Orientation Office offers a special program for adult non-traditional students and international students.

When students are accepted to the university, they receive an invitation to orientation. Every effort is made to accommodate students travelling great distances or with military obligations. Orientation is critical for all students and attendance is expected. Payment of both the administrative and participatory orientation is required. For additional information or for answers to questions, call (717) 389-4595. The Orientation Office is open weekdays from 9 a.m. to 4 p.m. and is located Room 16, Benjamin Franklin Hall.

Student Grievances

Procedures are outlined in the Pilot to provide students with a system to register complaints of alleged academic injustices relating to grades or other unprofessional conduct in the traditional teacher/pupil relationship, or such nonacademic grievances as violation, misinterpretation or discriminatory application of nonacademic policies and procedures, and/or the conduct of professional, nonprofession-

al, and student employees.

Career Development Center

The Career Development Center offers career counseling and planning assistance to students and alumni. In addition to individual counseling, an up-to-date career library is available. It contains occupational information, job search guides, employer/school district directories, corporate literature, and graduate/law school catalogues.

The center sponsors job search workshops, seminars and job fair programs throughout the year, maintains credential files for interested students and alumni, and hosts employers wishing to interview graduating students for positions within their organizations.

SIGI-Plus, a computer-based career guidance system, is available to assist students with the career decision-making process.

The center is located in 101 Kehr Union Building.

Veterans Affairs

An office for veterans' affairs, located in the Office of the Registrar, Room 6, Ben Franklin Hall, is staffed by a certifying official and work-study veterans who certify the enrollment of veterans and the dependents and widows of veterans to the Veterans Administration. The office also assists in education-related matters such as educational benefits from the Veterans Administration and financial aid.

University Store

The University Store sells books, supplies, imprinted clothing, and many other sundry items. Hours are from 8 a.m. to 8 p.m., Monday through Thursday, 8 a.m. to 4:30 p.m., Friday and 10:30 a.m. to 2:30 p.m. Saturday. Many services are offered to the university community, including books of postage stamps, dry cleaning, fax service, money orders, Western Union money order receiving, UPS, magazine subscriptions, gift certificates, class rings, laminating, free gift wrapping and special orders for trade books, software or any other materials an individual may need.

Campus Mail Service

The University Mail Room is adjacent to the University Store and is open from 8 a.m. to 4:30 p.m., Monday through Friday. The campus mail service assists students with mailing concerns.

Arts on Campus

Works of art are exhibited throughout the

year in the gallery in Haas Center for the Arts. The monthly exhibits in diverse media by invited guest artists often include gallery talks and workshops.

The Department of Art maintains a permanent collection with more than 300 works of art in buildings across the campus. The Percival Roberts III sculpture garden highlights the university's sculpture collection on the campus.

QUEST

QUEST, modeled after the Outward Bound Program, emphasizes the development of individual potential and teamwork through challenging and adventurous experiences, primarily in the outdoors. The development of leadership, communication, trust, and teamwork are important dimensions of the program.

Courses provide participants with recreational, educational, and personal growth experiences. Courses are offered to students, faculty, and staff of Bloomsburg University, other educational institutions, businesses, service organizations, and residents of Eastern Pennsylvania. Courses are primarily in Pennsylvania, though several times a year groups travel as far afield as Alaska, Colorado, Mexico, South America, Africa and Europe.

Courses include:

Backpacking	Mountaineering
Bicycling	Rock Climbing
Canoeing	Ropes Course
Caving	Team-building
Cross Country Skiing	Whitewater Rafting
Initiatives/New Games	Winter Camping
Kayaking	

QUEST offers a career concentration in conjunction with other departments of Bloomsburg University, which enables a student to graduate with academic skills and experiences appropriate for positions in human service, outdoor education, and management.

QUEST offers a seven day Orientation Program for Freshmen in the wilderness prior to the commencement of Fall classes. The program includes backpacking, rock climbing, and rappelling. The intent of this program is to prepare interested freshmen for leadership responsibilities while at the university and for broader responsibilities of civic and professional leadership.

QUEST manages an Equipment Rental Center providing a wide range of outdoor equipment for students, faculty, and staff and for residents of the community. For detailed information on the QUEST program, contact

the QUEST office in Walter Simon Hall at (717) 389-4323.

Athletics and Recreation

The university is a member of the National Collegiate Athletic Association, the Eastern College Athletic Conference, the Pennsylvania State Athletic Conference, and the Eastern Wrestling League.

The intercollegiate program includes baseball, basketball, football, cross country, soccer, swimming, tennis, track and wrestling for men; and basketball, field hockey, cross country, lacrosse, softball, soccer, swimming, tennis and track for women.

When not in use for instruction, intercollegiate athletics, or intramurals, athletic facilities are available for recreational use by students. These include an indoor track and tennis court, Nautilus equipment, a weight room and sauna, racquetball courts, two swimming pools, and a physical fitness center.

Intramural Sports

The university is a member of the National Intramural-Recreational Sports Association (NIRSA). Major responsibilities of NIRSA members include: informal recreational sport and fitness programming, recreation facility operations, fiscal management intramural sports programming, and the administration of outdoor recreational activities.

The majority of intramural sports are co-educational. Intramural sports include: aerobics, flag football, golf, tennis, field hockey, horse shoes, volleyball, walleyball, racquetball, 3-on-3 basketball, basketball, arm wrestling, wrestling, indoor soccer, outdoor soccer, floor hockey, bench press, ultimate Frisbee™, and special events.

Motor Vehicle Registration

Operation of a motor vehicle on campus is a privilege explained in the Motor Vehicle Regulations available in the University Police office located on the ground floor of the University Store building.

To have an automobile on the university campus, the resident student must be either 21 years of age or have earned 64 semester hours.

Special requests for permission to have a motor vehicle on campus from students not normally eligible are covered in Section 603 of the Motor Vehicle Regulations.

Eligible university personnel desiring to operate and/or park a motor vehicle on cam-

pus in order to use school facilities must register vehicles with the university and obtain from the University Police Department either a parking decal or a temporary permit when they arrive on campus. There is no grace period. Failure to adhere to this provision results in a fine. Students may hold only one valid parking decal at a time; however, emergency situations may warrant issuance of a temporary permit.

Visitors Parking

Visitors should obtain a visitors' parking permit from one of several offices on campus. Locations include Carver Hall, Waller Administration Building, Nelson Field House, University Police Department, Navy Hall, Andruss Library, McCormick Center, Hartline Center, Elwell Hall and Benjamin Franklin Hall.

On weekdays, overnight visitors must park in the hospital parking lot area reserved for university parking (black decal area). A visitors parking permit must be obtained from the University Police Department. On weekends, there is open parking, and visitors may park in either red, black or green areas only. Information on the hours of open parking can be obtained from the University Police Department.

A visitor cited for a parking violation who wishes to appeal the violation should report to the Office of University Police with the ticket before leaving campus.

Campus Child Center

The Bloomsburg University Campus Child

Center, located on the lower level of Elwell Residence Hall, is licensed to care for children aged 18 months to 12 years.

The Center, which operates as a daycare, provides a preschool and toddler program for children of university students, employees, and alumni. Daycare is from 7:45 a.m. to 5 p.m. and the preschool program is from 9 to 11:30 a.m. Operating days follow the academic calendar.

Preschool children, ages 4 and 5, have the opportunity to learn and discover through first-hand experiences — sensory, investigative, manipulative, and creative — in preparation for the learning that will come later from books.

The toddler program, for children ages 18 months to 3 years, involves free play, music, and storytelling to develop social skills and coping techniques as they separate from parents.

Daycare is available for school age children when necessary. Parents may use the center on a part- or full-time basis during the year, including summer. However, all children must be registered in advance. Registration materials and fee information can be obtained at the center (717) 389-4547.

The Campus Child Center, licensed by the Pennsylvania State Department of Public Welfare, is governed by the Pennsylvania State Day Care Service for Children Regulations. The Community Government Association provides funding to help support the center.

Undergraduate Program

The College of Arts and Sciences, College of Business and College of Professional Studies administer undergraduate curricula. Requirements for the curricula are in sections describing each college.

Each curriculum, leading to a baccalaureate degree, requires successful completion of at least 128 semester hours in the major, general education and free electives. This section deals with general education; requirements for each major are listed under department headings. While electives are unrestricted, it's helpful to consult with a faculty adviser.

When a student makes a tentative choice of a major, preliminary or prerequisite courses required in that major are assigned. Admission is selective or restrictive at the junior year entry level for some curricula. The university is not bound to admit the student if the student is not admissible according to the competition for available spaces or other selective criteria.

Students who plan to major in two departments must have a major adviser in each department and meet all of the major requirements of each department and all of the general education requirements. Double majors in some departments may require more than the minimum 128 semester hours for graduation. Double majors in departments in two colleges must have the permission of both college deans to declare a double major.

Credit

A semester hour is ordinarily defined as the credit for one weekly period of 50 minutes of lecture, discussion or recitation for one semester. In some cases as in laboratory, studio or internship, there may not be a one-to-one correspondence between experimental time and credit.

General Education Requirements

The goals of the General Education program are to develop:

- An ability to communicate effectively;
- An ability to think analytically and quantitatively;
- A facility to make independent and respon-

sible value judgments and decisions according to high ethical values and life goals;

- An appreciation of the need for fitness and lifelong recreation skills;
- A capacity for assessing the validity of ideas and an understanding of the approaches used to gain knowledge through the development of critical thinking abilities;
- A greater appreciation of theater, literature, art, and music through stimulation of one's creative interests;
- An understanding of our society and the relative position of an individual in this society;
- An understanding of the relationship between an individual and his/her physical and biological environments;
- A familiarity with the major contributions of human knowledge in the humanities, social sciences, natural sciences, and mathematics; and
- An awareness and global understanding of the relative position of the individual in the world community.

Specific Course Requirements:

1. Communication (9 credits; unless student qualifies for 20-104 Honors Composition in which case only 6 credits are required.)

Required composition courses: 20-101 Composition 1 and one of the following:

20-200 Writing Proficiency Examination

20-201 Composition 2

20-203 Approaches to Literary Study or a writing-intensive literature course:

- 20-131 Bible as Literature
- 20-151 Introduction to Literature
- 20-152 Literature and Society
- 20-156 Popular Literature
- 20-226 European Literature 1
- 20-227 European Literature 2
- 20-335 American Literature 1
- 20-337 American Literature 2
- 20-246 British Literature 1
- 20-246 British Literature 2
- 20-256 Non-Western Literature 1
- 22-257 Non-Western Literature 2

Students eligible for 20-104 Honors Composition are excused from taking 20-101 and

one of the second level courses. The remaining three credits in Communication are to be selected from these courses:

- 09-231 Technical Writing
- 10-101 French 1
- 10-102 French 2
- 10-203 French 3
- 10-204 French 4
- 10-205 Applied Phonetics and Pronunciation
- 11-101 German 1
- 11-102 German 2
- 11-203 German 3
- 11-204 German 4
- 12-101 Spanish 1
- 12-102 Spanish 2
- 12-203 Spanish 3
- 12-204 Spanish 4
- 12-205 Phonetic Theory and Practice
- 13-101 Russian 1
- 13-102 Russian 2
- 13-103 Russian 3
- 13-104 Russian 4
- 14-101 Italian 1
- 14-102 Italian 2
- 16-105 Chinese 1
- 16-106 Chinese 2
- 18-101 Latin 1
- 18-102 Latin 2
- 20-112 Practical Grammar
- 20-301 Creative Writing
- 25-103 Public Speaking
- 24-104 Interpreting Speech Communication
- 74-153 Introduction to Sign Language

2. Quantitative-Analytical Reasoning (3 credits)

- 40-246 Business & Economics Math 1
- 40-346 Business & Economics Stat 1
- 45-260 Basic Social Statistics
- 48-160 Basic Statistics
- 53-101 Math Thinking
- 53-111 Finite Mathematics
- 53-114 College Algebra
- 53-118 Applied Matrix Algebra
- 53-123 Essentials Calculus
- 53-125 Analysis 1
- 53-141 Introduction to Statistics
- 53-241 Probability and Statistics
- 56-110 Introduction to Computer Science

3. Values, Ethics & Responsible Decision Making (3 credits)

- 09-213 Science, Technology and Human Values
- 09-230 Human Sexuality
- 28-220 Ethics

- 28-290 Medical Ethics
 - 28-292 Contemporary Moral Problems
 - 41-105 Environmental Issues/Choices
 - 42-210 Values Conflict 20th Cent
 - 42-215 Global Issues: Contemporary Values
 - 46-102 Anthropology & World Problems
 - 46-260 Men & Women Anthropology Perspective
 - 48-131 Psychology Adjustment
 - 48-254 Psychology Aspects Society Issues
 - 50-254 Social Implications Biology
 - 82-217 Alcohol: Use and Abuse
- ### **4. Fitness & Recreational Skills (3 credits)**
- 05-149 Aquatics - Begin Non-Swim
 - 05-150 Beginning Aquatics
 - 05-151 Intermediate Aquatics
 - 05-155 Gymnastics
 - 05-200 CPR and Safety
 - 05-214 Fencing
 - 05-217 Bicycling
 - 05-219 Tennis
 - 05-221 Jazz Dance
 - 05-222 Creative Dance
 - 05-223 Modern Dance
 - 05-224 Fitness Dance
 - 05-228 Gymnastics
 - 05-230 Weight Training & Fitness
 - 05-231 Archery
 - 05-232 Bowling
 - 05-233 Badminton
 - 05-234 Golf
 - 05-235 Riflery
 - 05-236 Volleyball
 - 05-237 Mod Physical Education
 - 05-238 Racquetball-Handball
 - 05-239 Square Dance
 - 05-240 Fitness-Slimnastics
 - 05-241 Judo-Self Defense
 - 05-243 Backpacking
 - 05-244 Orienteering
 - 05-245 Canoeing
 - 05-246 Beginning Skin/Scuba Diving
 - 05-247 Basic Rock Climbing
 - 05-248 Basic Sailing
 - 05-249 Synchronized Swimming
 - 05-250 Lifesaving
 - 05-265 Basketball
 - 05-270 Exercise and You
 - 05-271 Intermediate Archery
 - 05-272 Intermediate Bowling
 - 05-273 Intermediate Golf
 - 05-274 Intermediate Tennis
 - 05-275 Intermediate Volleyball
 - 05-276 Intermediate Judo
 - 05-277 Advanced Sailing
 - 05-298 Fitness & Wellness (1 credit only)

- 05-321 First Aid & Safety (1 credit only)
- 05-397 Adult Hlth Dev Program (1 credit only)
- 50-205 Intro to Nutrition (1 credit only)

Distribution Requirements

*TOTAL = 51 or 54 semester hours

Thirty-six semester hours are required with 12 semester hours required from each of the three general academic areas of humanities, social sciences, and natural sciences and mathematics. No more than three semester hours from a given academic major may count toward this distribution requirement. Courses which an individual uses to satisfy the specific communication, quantitative/analytical reasoning, values/ethics, and fitness and recreation requirements may not be used to satisfy distribution requirements. Bloomsburg University Curriculum Committee (BUCC) or an individual academic department with the approval of the BUCC may exclude any of its courses from being counted as a distribution requirement.

Within these requirements, six semester hours must be selected from the approved list of diversity-focused courses. Such courses are designated with a double asterisk (**) in the course descriptions included in this catalog. Students must select two courses (3 semester hours) to fulfill this requirement. Diversity: 6 semester hours — Consult your dean for a complete listing of approved diversity-focused courses.

The two major sections of the General Education program are the Specific and Distribution Course Requirements.

In some cases, qualifications exist in the form of prerequisites, two semester continuity, etc. Consult the class schedule, the University catalog or the Student Information System for prerequisites and other qualifications. Please be aware that not every General Education course is offered each semester.

The courses appearing here are approved for General Education as of May 1, 1995. If a course was previously listed for General Education and does not appear in this class schedule, that course will still fulfill General Education credit for the student, provided the student enrolled in the course during the time the course was approved for General Education. However, students scheduling the course after the course no longer is approved may not receive General Education credit for the course.

Questions regarding courses listed as General Education should be directed to the aca-

demic department which offers the course.

Of the thirty-six (36) credits for the Distribution Requirements, twelve (12) credits are required from each of three general academic areas of Group A Humanities and the Arts, Group B - Social and Behavioral Sciences and Group C - Natural Sciences and Mathematics.

Courses selected to fulfill the Distribution Requirements must be from at least three different departments within each of the three groups with two or more credits required from each department selected. Courses which a student uses to satisfy the Specific Course Requirements in the categories of communication, quantitative/analytical reasoning, values/ethics, and fitness and recreation may not be used to satisfy the distribution requirements.

Students who otherwise meet the prerequisites are permitted to take any course offered for two or more credits by the departments listed below, unless the course is expressly excluded for general education by the university curriculum committee or the department with the approval of the curriculum committee.

No more than three credits from a given academic major may count toward the distribution requirement. Students with a double major must adhere to this policy for one of the majors.

Group A - HUMANITIES and the ARTS

Select courses from these departments:

- 30, 31, 32 - Art
- 25 - Communication Studies
- 20 - English
- 42 - History
- 10 - 18 - Languages and Cultures
- 27 - Mass Communications

35 - Music

28 - Philosophy

26 - Theatre Arts

In addition, course 09-171 Sch Sem Hum is eligible.

The following courses are not eligible for Group A credit:

None listed as of May 1, 1995

Group B - SOCIAL and BEHAVIORAL SCIENCES

Select courses from these departments:

- 46 - Anthropology
- 40 - Economics
- 41 - Geography
- 44 - Political Science
- 48 - Psychology
- 45 - Sociology and Social Welfare

In addition, these courses are eligible:

70-101 Intro Except Individuals

72-152 Intro Communication Disorders

The following courses are not eligible for

Group B credit:

- 40-246 Business & Economics Math
- 40-280 Special Topics
- 40-346 Business & Economics Stat 1
- 40-400 Econometrics
- 40-446 Business & Economics Stat 2
- 40-470 Senior Seminar
- 40-480 Adv Special Topics
- 40-490 Independent Study
- 41-350 Advance Planning

Group C - NATURAL SCIENCES and MATHEMATICS

Select courses from these departments

- 50 - Biological and Allied Health Sciences
 - 52 - Chemistry
 - 51 - Earth Science
 - 53 - Mathematics (not computer science courses)
 - 54 - Physics
- In addition, course 09-173 Sch Sem Nat Sci/Math is eligible
- The following courses are NOT eligible for Group C credit:
- 50-205 Intro to Nutrition
 - 09-230 Human Sexuality
 - 50-254 Social Implications Biology

Cultural Diversity Requirement

The Cultural Diversity requirement is effective for all degree students entering or re-entering with the fall semester 1993 and thereafter. Students enrolled in degree programs for the 1993 summer sessions or before are not required to meet this requirement.

Each student must successfully complete two courses from this list of diversity focused courses. These courses may be applied toward courses for the major, general education or free electives.

- 09-230 Human Sexuality
- 25-220 Intercultural Communication
- 25-494 SP TPC: Diversity
- 28-308 Feminist Philosophy
- 31-345 History of Near Eastern Art
- 31-346 History of Far Eastern Art
- 40-313 Labor Economics
- 41-102 World Cultural Geography
- 42-141 Modern Far East
- 42-143 Black Africa
- 42-210 Values Conflict 20th Cent
- 42-224 Immigrant Experience
- 42-227 American Woman
- 42-228 African-American History
- 42-469 Women/Gender Euro 1
- 42-470 Women/Gender Euro 2
- 45-215 Racial & Ethnic Minorities
- 46-102 Anthropology & World Problems
- 46-200 Principles of Cultural Anthropology
- 46-290 Anthropology of Race and Racism
- 46-310 Aztecs and Mayans
- 46-320 Contemporary World Cultures
- 46-350 Medical Anthropology
- 46-390 Sociology of the Child
- 46-410 Anthropology of Art
- 46-440 Language & Culture
- 46-450 Peoples & Cultures of South America
- 46-480 Religion & Magic
- 48-350 Psychology of Sex & Gender
- 60-394 Education in an Urban Society
- 70-101 Intro Exceptional Individuals
- 82-410 Community Health Nursing
- 93-355 Managing Multicultural Organizations
- 97-410 International Marketing
- 98-340 Law and Literature
- 98-407 Internationall Legal Environment

Buildings and Facilities

Bloomsburg's campus is composed of two tracts called the lower campus and upper campus, with a total area of 192 acres. Lower campus contains residence halls, dining hall, the university store, administration buildings, auditoriums, a library, academic buildings and recreation areas. The upper campus includes student apartments, a field house, stadium and athletic fields.

Instructional Buildings

Bakeless Center for the Humanities

Bakeless Center for the Humanities, completed in 1970, contains classrooms, lecture halls, faculty offices and an exhibit area. Used primarily by the departments of English, philosophy, economics and political science, this building also houses University Archives.

The building is named for the Bakeless family, the patriarch of which, Oscar H. Bakeless, was a prominent early faculty member. A native of Shamokin Dam, Pa., Oscar Bakeless was an 1879 graduate of Bloomsburg Literary Institute and Normal School and returned to teach for almost 30 years. He retired in 1929. His wife, Sara, also a graduate, later became a faculty member as well. The building also honors their son, Dr. John E. Bakeless, a graduate who served in both world wars and received acclaim for authoring literary and historical works, and their daughter, Mrs. Katherine Bakeless Nason, a graduate and benefactor of the school.

Benjamin Franklin Hall

Benjamin Franklin Hall, completed in 1930 for use as a campus laboratory school, accommodates several administrative offices and services including admissions, registrar, financial aid, student life, the Center for Counseling and Human Development and tutorial/504 services. Other services include advisement, cooperative education and academic internships, career development, orientation, academic computer services and a student computer laboratory.

Constructed at a cost of \$200,000, the building was originally used as a training school for kindergarten through sixth grade pupils. Elementary education majors were student teachers under the tutelage of experienced grade school teachers on the Bloomsburg State Teachers College faculty.

"Ben Franklin's" classical revival architecture recalls late colonial and early national themes when the building's namesake, Benjamin Franklin, was an important figure in American history. The three inscriptions chiseled over different entrances are attributed to Franklin. It is one of two buildings named for an individual without an institutional, county or Town of Bloomsburg connection (Scranton Commons being the other).

Centennial Gymnasium

Completed in 1939, Centennial Gymnasium contains a gymnasium with seating capacity of 1,200, an auxiliary gymnasium, a swimming pool, an adaptive lab and office and classrooms for health, physical education and athletics. QUEST maintains an equipment area in the basement.

Named to commemorate 100 years of higher education at Bloomsburg, Centennial Gymnasium was the institution's second indoor physical education facility and contained its first swimming pool.

Francis B. Haas Center for the Arts

Completed in 1967, Francis B. Haas Center for the Arts houses the 1,900 seat auditorium named for Marco and Louise Mitrani. The building includes classrooms, faculty offices for music and theater, facilities for music, debating and drama groups, and Haas Art Gallery.

After serving two years as state superintendent of public institutions, Dr. Haas was named president in 1927 and served until 1939. He was reappointed state superintendent and held the post until 1956, under five governors. During his tenure at Bloomsburg, 18 acres of land were added to the campus and six buildings were constructed.

Haas Center for the Arts is noted for its fan-shaped roof and the brick-face emblem of the commonwealth near the main entrance. In 1985, the auditorium was named for Marco and Louise Mitrani, 1920s immigrants to this country, in recognition of their philanthropic efforts on behalf of many agencies and organizations in the Bloomsburg area, including the university.

Hartline Science Center

Hartline Science Center, completed in 1968, is an instructional building with modern classrooms, the Kimber C. Kuster Lecture Hall, seminar rooms, laboratories, faculty office and

an exhibit area. It houses the departments of chemistry, physics, biology and geography and earth science. The building is named for three members of the Hartline family. Dr. Daniel S. Hartline served on the faculty from 1897 to 1935, most of the time as professor and chair of the biology department. His wife, Harriet (Hallie) Keffler Hartline was a member of the faculty for many years. Their son, H. Keffler Hartline, was a 1920 Bloomsburg graduate who became a medical research fellow at The Johns Hopkins University and was instrumental in biological research guidelines for the National Aeronautics and Space Administration. In 1967, Keffler Hartline received the Nobel Prize for medicine. Recognized for his discoveries on the working of the human eye, he is Bloomsburg's only Nobel laureate.

Kimber Kuster, a 1913 Bloomsburg graduate and former student of Daniel Hartline, became chair of the biology department upon Hartline's retirement.

James H. McCormick Center for Human Services

James H. McCormick Center for Human Services, which opened in 1985, is the hub of the College of Professional Studies, including seminar rooms, the dean's office, classrooms and faculty offices for the departments of nursing and curriculum and foundations. Also located here are the departments of communication studies, mathematics and computer science, mass communications, psychology, sociology and social welfare, in addition to audio visual resources, radio and television services, a student darkroom and the Institute for Interactive Technologies. The Curriculum Materials Center and laboratories for programs in elementary and secondary education, nursing, psychology and sociology are located here, as well as a student computer laboratory on the first floor. McCormick Center contains a number of general purpose classrooms and a multi-image projection room known as the University Forum.

McCormick Center was named for James H. McCormick, president of Bloomsburg State College from 1973 to 1983 and, since 1983, chancellor of Pennsylvania's State System of Higher Education.

Navy Hall

Navy Hall houses the department of communication disorders and special education, the Reading Clinic, the Speech, Hearing and Language Clinic and a number of classrooms

and offices.

Navy was constructed in 1939 as a campus laboratory school to provide monitored student teaching at the seventh through ninth grade levels. First called the Junior High School Building, it was later named the Laboratory High School.

During World War II, it was converted for use by candidates in the Navy V-12 Officer Training Program. In September, 1942, Bloomsburg State Teachers College became one of five sites for a V-5 Naval aviation program, in which cadets completed a college education while getting flight training. The following year, Bloomsburg, along with over 100 other colleges in the nation, became a center for the Navy's V-12 program, in which cadets were educated and trained for commissioning. The Navy used the building from 1942 through 1945, and in 1943 the name was changed to Navy Hall. Since 1946, this building has been used for regular college student classrooms.

E. H. Nelson Field House

E. H. Nelson Field House, built in 1972 on the upper campus, serves as the university's main sports arena and seats 2,600 spectators. It houses an indoor track, a six-lane swimming pool with adjacent seating for 500 spectators, faculty offices, handball courts, classrooms, equipment rooms, a Nautilus room and special facilities for physical training and therapy. The building is used for health and physical education classes, varsity athletic events, recreational activities and other campus activities which draw large audiences. Free shuttle bus transportation is provided regularly between the field house and the lower campus.

Named for Elna H. Nelson, class of 1911, the building is the successor to Centennial Gymnasium as the major multipurpose indoor athletic facility on campus. Nelson, nationally known as a leader in physical education, was baseball coach and director of health education at Bloomsburg from 1924 to 1945. Among those he coached was Danny Litwhiler, who went on to Major League Baseball fame with the Philadelphia Phillies and other teams. Nelson also served as president of the Alumni Association from 1946 until his death in 1961.

Redman Stadium

Redman Stadium, home of the Husky football and track teams, was named for Robert B. Redman and built in 1974. It has a seating capacity of 5,000, includes concession facilities

and an all weather track.

Redman served as football and baseball coach from 1947 to 1952. During that time, his football teams won three Pennsylvania Conference championships, and two of his teams went undefeated. Redman also taught economics and was assistant dean of men, and went on to become superintendent of schools in East Orange, N.J.

Litwhiler Field

Named for Danny Litwhiler in 1978, Litwhiler field is considered among the finest baseball fields in the Pennsylvania State Athletic Conference. Litwhiler, a 1938 graduate, played in Major League Baseball for the Philadelphia Phillies, St. Louis Cardinals, Boston Braves and the Cincinnati Reds during the 1940s and 1950s. He was a Golden Glove award winner for two of those clubs and was a member of the 1944 World Champion St. Louis Cardinals. The Golden Glove Award was donated to Bloomsburg by Litwhiler. He later coached Florida State University and Michigan State University baseball teams and finished his career in various posts with the Cincinnati Reds.

Science Hall

Commonly called "Old Science" to distinguish it from Hartline Science Center, houses offices of the departments of anthropology, art, history, languages and cultures and has several classrooms and studios.

Bloomsburg's second oldest campus building was built in 1906 for \$100,000; renovation in 1988-89 cost was \$3.3 million. The hall originally housed the sciences and the music department, and became known as Old Science Hall in the 1960s. It is located on land formerly owned by John Freeze, a long time member of the Council of Trustees. The land was originally used as Bloomsburg's first athletic field, Mt. Olympus.

Sutliff Hall

Completed in 1960, Sutliff Hall contains classrooms and faculty offices for the College of Business. It originally housed business education and the sciences, and was extensively renovated in 1987.

William Boyd Sutliff, for whom the building is named, served his alma mater from 1891 to 1937. A professor of mathematics and faculty athletic manager for many years, Sutliff became Bloomsburg's first dean of instruction in 1921 and remained so until his retirement in 1937. Known for his love for "the college

on the hill," Sutliff wrote poetry, which was published as *Alma Mater and Other Poems* when he retired.

Walter Simon Hall

Built originally as a laundry building and later serving as general space for classroom, Walter Simon Hall was dedicated in 1983 to the art professor who served from 1971 to 1977. Simon Hall is the only building on campus named for an African-American. Simon was an artist and an art historian who also served as the first director of the Educational Opportunity Program, now department of developmental instruction. Simon Hall now houses the QUEST office as well as some art department offices and classrooms.

Residence Halls, Dining Rooms and Student Union

Columbia Residence Hall

Columbia Residence Hall, completed in 1970, is a seven-story structure that houses 400 women. It contains lounges, study rooms, recreation areas, a special projects room, a guest suite and an apartment for the residence director.

Elwell Residence Hall

Elwell Residence Hall, completed in 1968, is a nine-story facility that can accommodate 609 women. It has recreation rooms and lounges, a guest suite, study rooms and apartments for the staff. On the ground floor is the office of residence life, Campus Child Center, the records center and the AFSCME office.

It is named for three generations of the Elwell family, the younger two of whom graduated from Bloomsburg and later returned to teach. Judge William Elwell served as trustee from 1868 to 1887 and president of the governing board for several years. His son, George E. Elwell, was one of the first graduates of the institution and succeeded his father on the Council of Trustees in 1887, continuing until 1906. George's son, G. Edward Elwell, taught foreign languages at Bloomsburg.

Luzerne Residence Hall

Luzerne Residence Hall, a four-story residence hall completed in 1967, accommodates 300 men. It has a lounge and recreation area and apartments for the staff. The office of academic support services is located on the ground floor.

Lycoming Residence Hall

Lycoming Residence Hall opened in the fall of 1976. It houses 250 women and has lounges, study rooms, recreation areas, special projects facilities and an apartment for the residence director.

Montour Residence Hall

Montour Residence Hall, a four-story structure built in 1964, houses 250 men. It includes recreation and lounge facilities, study rooms, a guest suite and an apartment for the residence director.

Montgomery Place Apartments

Montgomery Place Apartments, located on the upper campus, provides living accommodations for 380 upperclass students. Constructed in 1989, the two and three-bedroom apartments are clustered in six buildings. Occupants of the individual apartments must be of the same gender.

Northumberland Residence Hall

Northumberland Residence Hall, completed in 1960, accommodates 250 men. It includes lounge and recreation areas, study rooms and apartments for residence hall staff.

Schuylkill Residence Hall

Schuylkill Residence Hall is a four-story structure built in 1964 and houses 250 women. It includes recreation and lounge facilities, study rooms, a guest suite and an apartment for the residence director.

William W. Scranton Commons

William W. Scranton Commons, completed in 1970, is an air-conditioned dining facility with 1,175 seats and a serving capacity of 3,000 persons. A pizza shop and convenience store are located in the lobbies of the building. Additions to the facility were completed in 1992.

Scranton Commons is named for William S. Scranton, governor of Pennsylvania from 1963 to 1967. Scranton came from an old northeastern Pennsylvania family, after which the City of Scranton is named. Scranton Commons is only one of two buildings named for individuals without an institutional, county or Town of Bloomsburg connection.

University Store

Completed in 1956, the university store was originally used as the college commons, and from 1970 to 1973 as a temporary student

union. The building was remodeled and now serves as the campus store where students may purchase textbooks, sundry supplies and clothing. The building also houses the office of university police and the campus post office.

Marguerite W. Kehr Union

Marguerite W. Kehr Union, built in 1974, was renovated and expanded in 1992, and rededicated in 1993. It houses a new ballroom, the Student Health Center, computer facilities, a career development area, student activities, the Multicultural Center, recreational rooms, meeting rooms, a television room, lounge, multipurpose rooms and the Community Government Association and snack bar.

Named for Marguerite W. Kehr, dean of women from 1928 to 1953, the building was designated a student and social center and is surrounded by residence halls and the William S. Scranton Commons. Dr. Kehr worked closely with student government and was noted for her keen interest in students and their activities.

Student Recreation Center

The \$5.6 million Student Recreation Center, entirely funded by university students through a special recreation fee, opened in February, 1995. The 56,000 square foot facility includes exercise and fitness rooms, racquetball and basketball courts and a jogging track. The building is entirely air conditioned.

Administrative and Service Buildings

Buckalew Place

Buckalew Place, originally the home of Charles R. Buckalew, a U.S. Senator from 1863 to 1869 and a trustee of the Normal School, was acquired by the commonwealth for use as the president's home in 1926.

Buckalew's heirs sold the house with 14 acres to the Bloomsburg Literary Institute and State Normal School for \$6,000 in 1903. In 1916 the state took over complete ownership of the school and, with it, Buckalew Place.

A native of Columbia County, Buckalew served as a deputy district attorney, state senator, minister to Ecuador, U.S. Senator and U.S. Representative. From 1874 to 1890 he served as a Bloomsburg State Normal School trustee.

Boyd F. Buckingham Campus Maintenance Center

Boyd F. Buckingham Campus Maintenance Center houses offices, storage areas, vehicles and workshops. The building was named for Boyd F. Buckingham in 1986.

Buckingham, a 1943 graduate of Bloomsburg State Teachers College, returned to his alma mater in 1953. He served as director of public relations from 1970 to 1974 and vice president for administration from 1974 to 1981. During those years he was instrumental in campus development that constituted the greatest expansion in the university's history.

Carver Hall

Carver Hall, built in 1867, is the oldest building on campus and is included in the National Register of Historic Places. In addition to the Kenneth S. Gross Auditorium, Carver houses the office of the president, Alumni Room, and the offices of university advancement and social equity.

Carver Hall was first called Institute Hall after the school's name at the time, Bloomsburg Literary Institute. The building in its early days housed classrooms for institute students and community children and a chapel/auditorium. Over the years, interior and exterior alterations have changed the building. Most significant was replacement of the original cupola in 1900 with the current one to give the building an Independence Hall look. In 1939 a north wing and fire tower were added.

In 1927, at the request of the Alumni Association, the name was changed to Carver Hall to honor Henry Carver, architect and general contractor for the building, as well as the institution's first principal.

Kenneth S. Gross Auditorium is named after the benefactor who donated funds for the renovation of the auditorium, completed in 1993, as well as a scholarship fund for non-traditional students. Gross is a graduate of the university.

Fenstemaker Alumni House

Purchased by the Bloomsburg University Alumni Association in 1985 from the estate of Dorothy Dillon, a 1924 graduate, Fenstemaker Alumni House includes nearly four acres of land. The purchase was the culmination of hope engendered as early as the turn of the century when plans to build Alumni Hall were proposed and then abandoned. In 1986, the Alumni House was named to honor Howard F.

Fenstemaker, a 1912 graduate, a who taught French, Latin, Spanish and German as well as history for 37 years. He was also director of both the band and orchestra, editor of the Alumni Quarterly for 45 years and president of the Alumni Association for a decade.

The Veterans Memorial Garden on the front lawn was dedicated in 1989 to honor all Bloomsburg graduates and former students who served in the armed forces since 1839.

Harvey A. Andruss Library

Harvey A. Andruss Library, built in 1966, houses the university's collection of bound volumes, microtexts and other source and reference materials for study and research. The prominent feature of the building is the group of stained glass windows from the famous Tiffany Studios in New York City. Depicting the general theme of truth and virtue, the three windows at the back of the building were designed in 1919 and originally placed in Old Waller Hall (demolished in 1974) in 1920 in an effort to provide "an ecclesiastical atmosphere" to encourage students toward a more hushed demeanor. The four rectangular windows from the George W. Spence Company of Boston were placed in the adjoining Noetling Hall (demolished in 1967) about the same time for the same reason.

Dr. Andruss served the university as organizer and director of the business education department from 1930 to 1937, dean of instruction from 1937 to 1939 and president from 1939 to 1969. His 30-year service as president is the longest term in Bloomsburg's history and included the institution's greatest growth and change.

New Andruss Library Since 1992, fund raising and planning for a new library have been under way. To be located near Waller Administration Building, the proposed facility will double the space presently available in Andruss Library, and serve as a regional public resource, using the latest information technology to serve people and businesses in surrounding communities. It will serve as a focal point for resources, exhibits and programs that will attract regional attention.

Magee Center

Magee Center, donated to the university in 1988 by the Magee Foundation, houses offices of the School of Extended Programs and functions as the school's Center for Regional Development.

The two-story stone structure at 700 W.

Main St. was built in 1946-47 on a large tract of land 1.5 miles west of lower campus. It is used for conferences, training seminars and other programs.

Once the home of Bloomsburg industrialist Harry L. Magee, the property features a large central courtyard, black-marble fireplaces, a spiral staircase leading to the second floor and an indoor swimming pool complete with Italian tiling.

Waller Administration Building

Waller Administration Building, completed in 1972, contains offices of the provost and vice president for academic affairs, the dean of the College of Arts and Sciences, and the office of graduate studies and research. The site of the university's Visitor's Center, this building and offices for budget and administrative services; purchasing; university relations and communication; human resources; planning, institutional research and information management; and the department of developmental instruction. There are conference rooms and a central receiving area for university supplies and equipment.

The building is named for David J. Waller Jr., a Bloomsburg native and one of the most important figures in the institution's history. He was the son of D. J. Waller Sr., who founded Bloomsburg Academy in 1839 (the academy out of which Bloomsburg University ultimately developed). D. J. Waller Jr. graduated from Bloomsburg Literary Institute in 1869 and returned in 1877 to serve as principal of the state normal school until 1890. He served in the post again from 1906 to 1920, making his 27 years the second longest leadership term in Bloomsburg's history. Between 1890 and 1906, Waller served as Pennsylvania State Superintendent of Public Instruction and principal of what is now Indiana University of Pennsylvania.

Wilson House

Wilson House, at 720 E. Second St., was a private residence adjacent to the campus before the university acquired the property in 1988. It now hosts Upward Bound and guest facilities.

Formerly known as the Centennial House, it was named in 1991 for Samuel L. Wilson, a professor of English for 24 years and chairperson of the department from 1927-51. The Wilson House was built by and was the home of the Wilsons for many years.

Tri-Level Parking Garage

The Tri-Level Parking Garage on Second Street is a concrete structure completed in 1972 and accommodates approximately 200 vehicles.

Roadways and Walks

Five of the roadways on campus—four on the lower campus and one on the upper campus—and one walkway on the lower campus are named for individuals important to Bloomsburg University.

Laubach Drive

Dr. Frank C. Laubach was known as the man who taught millions to read. His "each one teach one" technique among the Moro people in the Philippines grew to a worldwide literacy campaign that is carried on today in 200 countries and over 300 languages through the Laubach Literacy International. Norman Vincent Peale called Laubach one of the world's five greatest men. Laubach was a native of Columbia County and a 1901 Bloomsburg graduate. Dr. Laubach is the only alumnus to have a U.S. postage stamp (30 cent) issued in his honor. The stamp issued in 1984 was part of the great American Series. Laubach Drive begins at East Second Street, runs past Benjamin Franklin Hall and Navy Hall and ends at Haas Center for the Arts.

Osuna Drive

Juan Jose Osuna came to the United States from Puerto Rico at age 16 and subsequently attended Bloomsburg State Normal School along with the many Spanish-speaking students who enrolled after the Spanish-American War. A member of the class 1906, Dr. Osuna eventually went back to Puerto Rico to become a missionary, then an educator. He served as dean of the College of Education at the University of Puerto Rico from 1928 to 1945. He subsequently traveled throughout Central America where he was instrumental in modernizing the school systems. His book, *A History of Education in Puerto Rico*, was published in 1949. Reflective of his love for the Bloomsburg area, upon his death in 1950, Osuna was buried in Orangeville. Osuna Drive runs behind McCormick Center for Human Services, past Haas Center for the Arts, around Columbia Hall and past Old Science Hall to Penn Street.

Schuyler Drive

Mary Freas Schuyler, a Bloomsburg native and a 1933 graduate of Bloomsburg State Teachers College was the only alumnus to die in the service of her county in World War II. For the ten years prior to joining the Women's Army Auxiliary Corps. (WAAC) in 1943, Schuyler was a teacher in Morristown, Pa. After basic training and while serving at Ft. Riley, Kansas, she volunteered for overseas duty and was sent to England where she was a postal locator helping get mail to the troops at the front. In mid-November 1944 she wrote home telling of her exhaustion from handling Christmas mail. Corporal Schuyler died of meningitis in Litchfield, England on November 24, 1944 at the age of 32. Schuyler Drive runs from East Second Street past the University Bookstore, between Kehr Union and Luzerne Hall and ends near the carpentry shop.

Swisher Circle

Charles Clinton Swisher was one of the earliest students, attending classes when the Bloomsburg Literacy Institute was housed in a building on the corner of West Third and Jefferson Street. He went on to receive a law degree from Columbia University, and studied at universities in Europe as well. Swisher was an attorney in New York City, a land developer in California and an agriculturalist before turning to the academic world. He founded and chaired the history department at George Washington University where he taught medieval history and always met his classes attired in a morning coat. He taught from 1896 until 1927. Swisher was a friend of Theodore Roosevelt, Woodrow Wilson, Queen Victoria and poets Browning and Tennyson. Swisher Circle runs from Lightstreet Road past the McCormick Human Services Center, left past Waller Administration Building and the tennis courts out to Lightstreet Road at Buckingham Maintenance Building.

Chuck Daly Way

In August 1993 the walkway alongside Centennial Gymnasium was named for Chuck Daly, former basketball player (1949-1952) at Bloomsburg State Teachers College. Although he was the leading scorer for his last two years,

he is much better known for his after graduation accomplishments. He held a series of basketball coaching jobs at the high school, college and professional levels. He then coached the Detroit Pistons to back-to-back NBA Championships in the late 1980's and the 1992 U. S. "dream team" to a gold medal in the Olympics at Barcelona.

Welsh Circle

The major road around the upper campus and the athletic complex, Welsh Circle is named for Dr. Judson P. Welsh who served as Bloomsburg's sixth principal (president) from 1890-1906. Upon his resignation to become vice-president at Pennsylvania State College (now Penn State University), the trustees noted that under Welsh's sixteen years the school had "been elevated in moral tone, advanced intellectually and financially and increased in numbers in as great a ratio as under any former principalship." A Bloomsburg area native, Welch was responsible for having the first gymnasium built on campus.

World War I Memorial (1919)

Originally entitled the War Hero Memorial Pinery of the Class of 1919, the memorial lies on the front lawn, north of Carver Hall. Pine trees honoring each of fifteen Bloomsburg State Normal School students who died in World War I were planted in 1919; on Decoration Day (now more commonly called Memorial Day), May 30, 1922, a boulder marker with a bronze plaque naming the fallen was placed and dedicated. With the construction of Schuylkill Residence Hall in the early 1960's some pine trees were necessarily removed, leaving only ten.

Pergola (1916)

A dictionary definition of pergola is "a tunnel-shaped structure of latticework upon which climbing plants are grown." Given to the university by the class of 1916, the pergola situated just north of Montour Hall served as the locale for outdoor pageants (including May Day and Ivy Day celebrations) and plays. This was at a time when a grove and lagoon embraced the structure and plenty of space existed for rows of spectator seating.

University Services

Harvey A. Andruss Library

General Information

The Harvey A. Andruss Library houses more than 350,000 bound volumes, 1.8 million microtexts, and 1,700 current periodical subscriptions. The Library also contains extensive collections of Pennsylvania Commonwealth documents, phonograph records, compact discs, juvenile and young adult books, and art exhibition catalogs.

Online access to more than 500 information databases is available through a CD-ROM local area network, the online FirstSearch, and librarian-mediated DIALOG searching.

Andruss Library provides 450 study stations on three levels. The third level has been designated the "Quiet Level" and is furnished with individual carrels and study tables. Students are requested to assist in maintaining this floor as a quiet study area.

Library faculty at the Reference Desk are available during most library hours to answer questions, assist students searching for information and resources, and advise regarding research projects. Library orientation through interactive video is available.

The charge for photocopying is 6 cents using a magnetic card and 10 cents using cash. The charge for microform copying is 10 cents for a paper copy and 25 cents for a microfiche copy.

General Collection

The Harvey A. Andruss Library houses the university's collections of books, periodicals, phonodiscs, and some audiovisual resources. Other resources are located in the Curriculum Materials Center and Audio-Visual Resources in the McCormick Center for Human Services and the University Archives in the Bakeless Center for the Humanities. The Circulation Desk maintains the Reserves Collection and the Current Periodicals Collection. Print journals dating before 1985 are in accessible storage and are retrieved on request Monday through Friday by the Circulation Desk.

Special Collections

These collections contain unusual and rare first editions, autographed books, and illustrated books. Specific interests are art exhibition catalogs and covered bridges.

University Archives

The University Archives is the depository for archival and other materials relating to the history of Bloomsburg University. Its collections include resources on Frank C. Laubach, the alumnus known for his literacy programs.

Public Access Online Catalog (PALS)

The PALS catalog includes all books and phonorecords in the General, Juvenile/Young Adult, and Reference collections and many of the microform resources. Items can be searched by term, subject, author, title, and other strategies.

The circulation status of materials is available online. Catalogs of other libraries can be searched through the Internet.

Database Searching

CD-ROM bibliographical, abstract, and full text databases are available through the library's local area network (LAN), which is connected to the campus-wide LAN. Current databases include ABI/Inform, Business Index, ERIC, CINAHL, Periodical Abstracts, and PsycLit. More than 40 additional information databases can be searched on FirstSearch. The databases are helpful to students in locating resources and information for research projects.

Online access to more than 500 additional information databases through DIALOG is available through skilled faculty librarians. Charges for this service are usually nominal. Requests can be made at the Reference Desk.

Reference and Instruction Services

Faculty librarians at the Reference Desk are available 83 hours each semester week to assist students with research methodology and the use of information resources. An interactive video program and topical research guides are available to assist students in learning to use the library's resources. Library faculty provide course-related bibliographic instruction and offer open classes on using the various online sources.

Interlibrary Loan

Materials not available in the library's collections may be borrowed from other libraries, usually without cost. Requests are accepted at the Reference Desk.

Academic Computing Facilities

Bloomsburg University has a strong commitment to information technology. Academic Computing provides support for students and faculty computer needs while Computer Services provides services relating to administrative computing needs. The departments work together to provide campus networking, end-user support and access to network information.

Student computing facilities are located throughout the campus. There are over 450 computers, nearly 140 printers, including over 27 laser printers, in labs, classrooms and general access work areas. Nearly all computers are on the campus ethernet network which is connected to the Internet. Internet addresses and access will be provided to students at no cost.

Central clusters of general access computer labs and work areas are located in Ben Franklin Hall, McCormick Center for Human Services, Hartline Science Center, Sutliff Hall and Kehr Union Building. Computer classrooms and specialized labs are located in Sutliff Hall, Bakeless Center for the Humanities, Navy Hall, Old Science Hall, Hartline Science Center and the McCormick Center for Human Services.

There are several host computers used by students and faculty for network access. These systems use the Unix operating system. All students can request an account on one of these computers. From these host computers, students can send and receive e-mail from others on campus and from off campus using the SSH-Enet and Internet, access the World Wide Web and gopher sites. It is accessible from the networked PCs and Macs and through more than 40 dial-in modems which can be accessed from dorms and off-campus locations. About half of all the students now have active Internet accounts.

The student computer lab in McCormick Center for Human Services room 1148 houses an IBM RISC 6000/G30 minicomputer. This system has FORTRAN, COBOL, Pascal, Ada, C, C++, Minitab, and the IBM Database 2. A cluster of Sun workstations for specialized use is located in 5 Ben Franklin Hall.

The Unisys 2200 is the administrative computer used by students for statistical analysis using SPSS, FORTRAN programming, PALS online library catalog and the student registration process. This computer can be accessed by networked PCs and dial-in modems.

The computers in labs and classrooms are networked to file servers and laser printers. Computer labs consist of PC and Macintosh computers having access to word processing, spreadsheet and other programs. By using networked PCs and Macs, students have access to the mini and mainframe host computers as terminal users. Computer classrooms are available for general student use when they are not being used for class.

Work areas are monitored by student consultants who are available to help students with problems using the equipment and basic software. Manuals are available in the general access areas and for checkout at the reserve desk in the Andruss Library. Most general lab areas are open seven days a week during the fall and spring semesters. The schedules of current open hours for labs and classrooms are posted at each location.

Other Services

University Writing Center

The one-on-one tutorial services of the University Writing Center are available to all students. The Center provides conversation, advice, and ongoing support for writers at any stage of work on a writing project. Tutoring in reading, researching, note-taking, drafting, rewriting, editing, and proofreading is provided. The service is offered on a drop-in basis; no registration, referral, or appointment is necessary.

The Center also works with teachers to design programs tailored to particular classes. Small group meetings, class demonstrations, and check-in points during a writing project can all be arranged with the Center's director.

Located in Room 206, Bakeless Center for the Humanities, the Center is open 30 to 40 hours each week, including some evening hours. The Writing Center's staff readers are successful student writers who work under the supervision of Director Terrance Riley. Interested students and faculty should contact the English Department for more information: (717) 389-4427.

Bloomsburg University Foundation

The Bloomsburg University Foundation, Inc., was established in 1970 as a nonprofit educational corporation to assist the institution. The foundation, which was reactivated in January 1986, has the responsibility of securing private funds to maintain and enhance quality and excellence in all areas of the uni-

versity. The Bloomsburg University Foundation conducts an active program of information, cultivation, and solicitation among alumni, corporations, foundations, and private individuals. The foundation membership includes outstanding business, professional, and civic leaders from throughout the Commonwealth.

Institute for Comparative and International Management Studies

The Institute for Comparative and International Management Studies (ICIMS) has been created to fulfill Bloomsburg University's mission and goals through sponsorship and initiation of activities aimed at increased understanding of cross-cultural and comparative management issues.

The institute initiates, coordinates, and administers joint degree programs with overseas universities in business administration; sponsors management research projects within the United States and at overseas sites; provides consulting services and workshops in all areas of management; and develops and administers quality executive development and training programs as required by a particular country.

Curriculum Materials Center

The basic objective of the Curriculum Materials Center is to locate, acquire, catalog, and make accessible curricular and instructional materials to preservice and inservice teachers. The resources housed in the center include elementary and secondary textbooks, a multicultural curriculum materials collection, curriculum guides, games, instructional materials kits, tests, and computer software. A cluster of Macintosh microcomputers and a laser printer are also available.

Reading Clinic

The Reading Clinic offers free diagnostic evaluation of reading skills of school-age children and adults. Free remedial tutoring is also provided (Saturday mornings) on a space-available basis. Consultation with the parents of school-age children is included in the evaluation process. The services of the clinic are available September through August.

Speech, Hearing, and Language Clinic

The Speech, Hearing, and Language Clinic provides services to students, faculty, staff, and the community. Available services include evaluation and therapy for speech, voice, language, and fluency; speech reading and audi-

tory training for the hearing impaired and parent counseling. Audiological assessment includes special site of lesion testing, hearing aid evaluations, and fitting.

Institute for Interactive Technologies

The Institute for Interactive Technologies (IIT) provides research, training, education, and entrepreneurial assistance to solve training and operational problems that occur in education and industry through the application of various interactive technologies. The IIT designs, develops, and produces interactive technology-based applications that include computer-based interactive videodisc and digital technologies such as CD-I and QuickTime movies. The IIT also provides workshops for interactive video training and opportunities for assistantships for graduate students in the Master of Science program in Instructional Technology.

Television and Radio Services

The Office of Television and Radio Programs and Services provides assistance with the production of instructional and other campus-oriented television production. While priority is given to academic endeavors, the office also has a strong commitment to community service through program production and other services. The office is also administratively responsible for WBUQ-FM, the student-operated campus radio station.

The facility houses three television studios, ranging from a sophisticated multi-camera studio for broadcast-level production, to a single-camera VHS studio where faculty and students can easily videotape projects in support of classroom assignments or evaluations. Also available are portable equipment, several video editing rooms, an audio recording studio, a video copystand, and a video paintbox device.

The office is the university's resource center for satellite videoconferencing, provides on-location taping of lectures, presentations and other academic activities, and can record informational programs off-air and off-satellite. Videotapes can be copied through the office (copyright permitting) and tapes recorded in incompatible overseas formats can be converted to the American television system.

The office also operates the campus video message center providing constantly updated information to television monitors located in several public areas on campus, as well as over BUTV, the university's cable television channel, which can be seen throughout the Blooms-

burg and Berwick areas. The message center is suitable for the posting of class schedule changes, campus events, non-profit group activities, and general announcements and can be accessed by calling 389-BUTV.

Audio Visual Resources

Audio Visual Resources (AVR) provides Bloomsburg University faculty and staff with an array of audio-visual equipment, materials, and services. Available equipment includes video and 16mm film playback, audio equipment, 35mm and Polaroid cameras, flashes and accessories, slide projectors, overhead and opaque projectors, screens, easels, and many other useful items.

The AVR staff can arrange for film delivery and set-up in classrooms for faculty members

as well as delivery of other audio-visual equipment. There is also a repair center for university-owned audio-visual equipment.

The facility houses an auto-tutorial lab where faculty may deposit audio-visual materials for independent study by students. The lab accommodates the viewing of films, videos, slides, audio cassettes, and records. There is also a photo copystand area where materials can be photographed for the creation of slides.

Additional resources include: transparency machines, dry presses, posterboard mounting materials, and lamination services. The area houses a sign and poster-making unit that can instantly generate poster-size displays from letter-sized originals. If needed, the AVR staff can assist in the creation of the original document.



BLOOMSBURG UNIVERSITY

Programs of Study

Codes and Academic Programs

- 01 Developmental Studies
- 05 Health and Physical Education
- 09 Interdisciplinary Studies
- 10 French
- 11 German
- 12 Spanish
- 13 Russian
- 14 Italian
- 16 Languages and Cultures
- 18 Latin
- 20 English
- 25 Communication Studies
- 26 Theater Arts
- 27 Mass Communications
- 28 Philosophy
- 30 Art
- 31 Art History
- 32 Art Studio
- 35 Music
- 40 Economics
- 41 Geography
- 42 History
- 44 Political Science
- 45 Sociology & Social Welfare
- 46 Anthropology
- 48 Psychology
- 50 Biological and Allied Health Sciences
- 51 Earth and Space Science
- 52 Chemistry
- 53 Mathematics
- 54 Physics
- 55 Marine Science
- 56 Computer Science
- 59 Natural Science and Mathematics
- 60 Educational Foundations
- 61 Military Science
- 62 Early Childhood and Elementary Education
- 63 Reading
- 65 Secondary Education
- 67 Military Science-Army
- 70 Special Education
- 71 Teach Mentally Retarded
- 72 Speech Pathology and Audiology
- 74 Communication Disorders
- 79 Professional Studies
- 80 Health Sciences
- 82 Nursing
- 86 Medical Technology
- 89 General Transfer
- 90 Business, General
- 91 Business, Accounting
- 92 Computer and Information Systems
- 93 Business Management
- 94 Business, Office Procedures
- 96 Finance
- 97 Marketing
- 98 Law and Legal Elements — Bus. Law
- 99 Administrative

*Note: Courses designated with ** are included on the approved list of diversity-focused courses. Students must select two courses (3 semester hours) to fulfill the diversity-focused requirement.*

Department of Accounting

Faculty

Richard L. Baker, Chairperson, Professor — B.S., M.B.A., Bloomsburg State College; Ph.D., The Pennsylvania State University; C.P.A., C.M.A., C.I.A.

Martin Billet, Associate Professor — B.S., M.B.A., Bloomsburg University; C.P.A., C.M.A.

Michael C. Blue, Associate Professor — B.S., University Of Wisconsin; M.S.B.A., Boston University; M.S., University Of Wisconsin; Ph.D., University of Idaho, C.P.A.

Nancy Coulmas, Associate Professor — B.S., New York Institute of Technology; M.B.A., St. Bonaventure University; Ph.D., The Pennsylvania State University

Lester J. Dietterick, Associate Professor — B.S., M.Ed., Bloomsburg State College; M.S.B.A., Bucknell University

Alf Eastergard, Associate Professor — B.S., Bob Jones University; M.B.A., Ph.D., University of Nebraska; C.P.A., C.M.A.

E. Burel Gum, Professor — B.S., Bloomsburg State College; M.S.B.A., Bucknell University; Ed.D., University Of Pittsburgh

Dennis B. K. Hwang, Professor — B.A., Cheng-chi University; M.A., Ph.D., University Of Oklahoma; C.P.A., C.M.A.

Richard E. McClellan, Assistant Professor — B.S., M.Ed., Bloomsburg State College; M.S.B.A., Bucknell University; C.P.A.

Richard Schrader, Assistant Professor — B.A., Michigan State College; M.S., Central Michigan University; C.P.A., C.I.A.

Degree Program

Bachelor of Science in Business Administration

A total of 63 semester hours is required for a major in accounting under the business administration degree program.

Goals and Objectives

The accounting curriculum provides specialized knowledge and skills to prepare graduates for entry-level accounting positions in public accounting, private industry, banking, government, higher education, and health care. It also provides the necessary academic

preparation to become a certified public accountant.

Required Courses

Required courses include:

Accounting 91.221, 91.222, 91.223, 91.321, 91.322, 91.323, 91.324, 91.342, 91.348; Business Law 98.331, 98.332; Computer and Information Systems 92.150; Management 93.344, 93.445, and 93.446; Finance 96.313; Marketing 97.310; and Economics 40.346.

Elective Courses

Select 9 semester hours from courses in business and economics as electives. Accounting courses which may serve as business electives include:

91.320, 91.430, 91.431, 91.448, 91.424, and 91.449. Six semester hours in an internship experience (91.432) also may be applied toward this elective requirement.

Free Electives

Select 11 semester hours in free elective courses. It is highly recommended that students satisfy this requirement with accounting courses.

Note: Graduation requires successful completion of a total of 128 semester hours. Forty percent (52 semester hours) must be earned in courses at the 300 level or above.

General Education Courses

Required general education courses include: English 20.101 and 20.201; Communication Studies 25.103; Economics 40.246 (or Mathematics 53.123), 40.211, 40.212; Mathematics 53.118. Also required are 3 semester hours in Values and Ethics; 3 semester hours in Fitness and Recreational Skills; 12 semester hours in Humanities and the Arts; 12 semester hours in Social and Behavioral Sciences, and 12 semester hours in Natural Sciences and Mathematics.

Accounting (Code 91)

91.220 Financial Accounting (3) — Familiarizes students with a basic understanding of generally accepted accounting principles and their

applications. Includes sole proprietorship, partnership, and corporate accounting. General ledger and/or spreadsheet computerized accounting required. For non-accounting majors only. *Prerequisite: 92.150*

91.221 Principles of Accounting I (3) — Presents the accounting cycle covering both service and merchandising activities of a sole proprietorship; special journals and special ledgers, accrued and deferred items and receivables and inventories. General ledger and/or spreadsheet computerized accounting is required. *Prerequisite: 92.150*

91.222 Principles of Accounting II (3) — Further develops the accounting cycle; recording, summarizing, interpreting financial data for partnerships and corporations. Includes cash flow, long-term liabilities, plant assets, and payroll accounting. A practice set and general ledger and/or spreadsheet computerized accounting are required. *Prerequisite: 91.220 or 91.221*

91.223 Managerial Accounting (3) — Presents volume-cost-profit analysis, special decisions, operational and financial budgeting, control and performance evaluation, job-order and process costing, variance analysis, cost allocation, quantitative decision-making techniques, and analysis of financial statements. Students are expected to be proficient in the general use of Lotus 1-2-3 or Lotus 1-2-3 compatible electronic spreadsheets. Students are required to retrieve, modify, complete, save, and print electronic spreadsheets dealing with many of the topics. *Prerequisites: 91.220 or 91.222 and 92.150*

91.320 International Accounting (3) — Addresses needs of accounting and finance students wishing to become more qualified in accounting on a global perspective. Provides an international accounting component for students who have completed foundation courses. *Prerequisites: 91.220 or 91.222. Meets cultural diversity requirement.*

91.321 Intermediate Accounting I (3) — Presents the conceptual framework of accounting, accounting environment and information processing system, financial statements and the accounting standards regarding present and future value concepts, cash and receivables, temporary investments, inventories, and short-term liabilities. Requires the use of Lotus 1-2-3 to solve computer problems in each chapter. *Prerequisite: 91.222*

91.322 Intermediate Accounting II (3) — Presents accounting standards for property, plant, and equipment, intangible assets, income recognition, long-term debts by borrower and lender, formation of corporations and stockholders' equity, retained earnings, stock rights and options, and investments in securities and consolidated financial statements. Requires student to use an approved word processing software package to produce a research paper that analyzes one FASB, reviewing the related accounting literature. *Prerequisite: 91.321*

91.323 Intermediate Accounting III (3) — Presents accounting standards pertaining to statement of cash flows, pension plans, leases, earnings per share, income taxes, accounting changes and error corrections, and financial reporting and changing prices. Use of Lotus 1-2-3 to solve computer problems in each chapter is required.

91.324 Federal Tax Accounting (3) — Introduces basic tax laws pertaining to preparation of individual federal tax returns and supporting schedules. Emphasis on tax law research using federal tax services and contemporary professional literature. *Prerequisite: 91.321*

91.342 Auditing Theory and Procedure (3) — Outlines principles, standards, procedures, and techniques applicable to internal and public auditing; consideration of the audit report and development of working papers for preparation of the report. Use of commercial computer packages to generate audit programs. Use of Lotus templates to work problems and use of word processing package to prepare a research paper. *Prerequisites: 91.322, Economics 40.346*

91.348 Cost Accounting (3) — In-depth study of the three major production costs - raw material, factory overhead, and labor - for a job order cost system. *Prerequisite: 91.321*

91.424 Advanced Federal Tax Accounting (3) — Assigns group and individual projects selected from the following areas of advanced tax accounting; partnerships and corporations, Pennsylvania corporate taxes, estates and trusts, reporting to governmental agencies. Includes lectures, discussion of issues, and practice in the solution of problems. *Prerequisite: 91.324*

91.430 Advanced Accounting I (3) — Applies accounting principles to special problems in the consolidation and merger of business enterprises. Includes consideration of the basis

for such combinations, consolidated statements on date of acquisition as well as at subsequent dates with special emphasis on design, construction, and utilization of integrated microcomputer-generated worksheets and financial statements. *Prerequisite: 91.322*

91.431 Advanced Accounting II (3) — Focuses on accounting principles and practices of governments and non-profit institutions. Includes partnerships, estates, trusts, and bankruptcy accounting. *Prerequisite: 91.322 or consent of the instructor*

91.432 Internship in Accounting (6) — Provides work experience in the accounting pro-

fession. *Prerequisite: 80 semester hours completed and adequate course preparation for the tasks to be performed.*

91.448 Advanced Cost Accounting (3) — Continuation of 91.348, concentrating on process cost, standard cost, and budgets. Emphasis on methods used to analyze and interpret cost data. *Prerequisite: 91.348*

91.449 CPA Problems (3) — Addresses the application of procedures for the solving of a cross section of complex accounting problems and the discussion of theory and practice. *Prerequisites: 91.324, 91.342, and 91.348; senior standing or consent of the instructor*

Allied Health Preparatory Programs

Pre-Physical Therapy, Pre-Occupational Therapy, Pre-Cytotechnology, Pre-Pharmacy

Program Coordinator

James E. Cole, professor, Department of Biological and Allied Health Sciences

Advisers

Lynne C. Miller, professor, Department of Biological and Allied Health Sciences

Cynthia A. Surmacz, professor, Department of Biological and Allied Health Sciences

Margaret L. Till, associate professor, Department of Biological and Allied Health Sciences

Goals and Objectives

The programs in allied health sciences encompass those health areas in which individuals support, aid and increase the efficiency and effectiveness of other health professionals by becoming a contributing member of a health care team. Programs in this area combine natural science and liberal arts education with clinical instruction. In general, students who complete any of the programs may enter their professions immediately. Others may select post-graduate education in health care. Central to most allied health programs, especially the clinical portion, is satisfactory completion of the clinical standards, often referred to as the *Essentials*. These standards establish requirements related to curriculum, personnel, financing, resources, and records.

Program Description

At Bloomsburg University the preparatory programs in physical therapy, occupational therapy, pharmacy, and cytotechnology usually span two to four years. Student then transfer to another institution for their clinical training and, upon completion of the program, earn a baccalaureate or master's degree. Bloomsburg University does not award specific degrees in these areas.

Students who select these preparatory programs follow a course of study that not only prepares them for entry into a variety of programs at other schools, but provides the option of pursuing a bachelor's degree in biology if they should decide to complete a degree program at Bloomsburg University.

The university can not guarantee placement

in allied health programs at other institutions; however, the school boasts a high rate of success in matching students with clinical programs and the variety of placement sites is considerable.

The opportunity to obtain degrees in physical therapy, occupational therapy, or cytotechnology is enhanced by an affiliation with Thomas Jefferson University's College of Allied Health Sciences. This agreement facilitates the transfer of students who have completed a minimum of two years preparatory work at Bloomsburg into upper-division baccalaureate and master's programs at Thomas Jefferson University. This "2 plus 2" or "2 plus 3" arrangement couples an educational experience at a rural university with advanced clinical training at a major medical center in Philadelphia. Although the "2 plus 2" arrangement remains in place for most allied health programs, the arrangement for physical therapy is "2 plus 3" and culminates in a master's degree from Thomas Jefferson University.

It is important to note that many physical therapy programs are entered after the student has received a baccalaureate degree, and the postbaccalaureate program leads to a master's degree.

Bloomsburg University is an active participant in the PACE (Plan A College Education) program sponsored by Thomas Jefferson University's College of Allied Health Sciences. PACE is an advanced early admission program for academically talented secondary school seniors who wish to matriculate to Thomas Jefferson University after attending an accredited university for, at least, the first two years.

All colleges of pharmacy in the United States offering the Bachelor of Science in pharmacy require five years of college education for the completion of degree requirements. The five year curriculum is usually divided into two years of pre-pharmacy education and three years of professional pharmacy education. Thus it is a "2 plus 3" program. Students who present course credits for pre-pharmacy work done at Bloomsburg University, and for which they have received a grade of C or better, have been given credit for courses which correspond

in length and content with those prescribed by the curricula in most colleges of pharmacy accredited by the American Council of Pharmaceutical Education.

Curriculum Requirements

The curricula for these preparatory programs vary. Students are encouraged to design a program that satisfies the requirements of the school to which they intend to transfer. For example, the courses cited below under "Professional Courses" are required by Thomas Jefferson University's physical and occupational therapy programs.

Professional Courses

The following courses are required: English

20.101, 20.201; Sociology 45.211 (not required for physical therapy); Anthropology 45.200 or 45.315 (not required for physical therapy); Psychology 48.101, 48.210 or 48.211, 48.335 (required for occupational therapy only); Biological and Allied Health Sciences 50.110, 50.120, 50.173, and 50.174; Mathematics 53.112 or 53.123 or 53.125.

Chemistry and physics courses are required for the physical therapy program at Thomas Jefferson University. These include: Chemistry 52.115 and 52.131; and Physics 54.111 and 54.112. Students must select additional elective courses to complete 55 semester hours in occupational therapy or 65 semester hours in physical therapy.

Department of Anthropology

Faculty Credentials

Robert R. Reeder, Associate Professor, Department Chairperson — B.A., M.S., The Pennsylvania State University; M.A., University Of Colorado

Thomas F. Aleto, Associate Professor — B.A., University Of Notre Dame; M.A., Ph.D., University Of Illinois, Urbana-Champaign

Susan R. Dauria, Assistant Professor — B.A., State University of New York College at Geneseo; M.A., Ph.D., State University of New York at Albany

David J. Minderhout, Professor — B.A., M.A., Michigan State University; Ph.D., Georgetown University

Dee Anne Wymer, Associate Professor — B.A., M.A., Ph.D., The Ohio State University

Degree Program

Bachelor of Arts in Anthropology
A total of 36 semester hours is required for a major in anthropology.

Goals and Objectives

Anthropology, the study of humankind, attempts to establish useful information and generalizations about people, their behavior, and their cultural and biological origins, to arrive at the fullest possible understanding of human diversity. Anthropology promotes global cultural awareness through classroom studies of cultures everywhere. Anthropology, in common with other sciences, is concerned with the formulation and testing of hypotheses or tentative explanations of observed human phenomenon. Anthropology also has an important humanistic tradition.

At Bloomsburg University, anthropology is divided into three study areas: cultural anthropology which studies ways of life in societies across the world; physical anthropology which traces human origins and biological variability; and archaeology which seeks to explain human behavior by studying material remains from past cultures. The Department of Anthropology's principle mission is to provide a liberal education for all students. Graduates in this discipline have been very successful in gaining employment in business and government

and in preparation for academic careers.

Required Courses

The following courses are required: 46.200, 46.210, 46.220, 46.405, 46.470, and either 46.301, 46.466, 46.475 or 46.497; Sociology 45.260 or Psychology 48.160 or Mathematics 53.141.

Elective Courses

Students may choose five courses, totaling 15 or more semester hours. At least 6 semester hours must come from each of the two subdisciplines: *Archaeology* — 46.300, 46.301, 46.310, 46.311, 46.340; *Cultural Anthropology* — 46.102, 46.260, 46.290, 46.320, 46.350, 46.380, 46.390, 46.410, 46.440, 46.450, 46.466, 46.475, 46.480, 46.495, 46.497. Students contemplating graduate school are advised to take an introductory course in computer science.

General Education Courses

The anthropology department lists suggested courses in other disciplines for majors in the department booklet *Anthropology at Bloomsburg*. With the exception of a needed proficiency in statistics, there are no specific general education courses recommended for this major.

Minor in Anthropology

A minor constitutes 18 semester hours in anthropology. This includes three required courses, 46.200, 46.210, and 46.220, and 9 semester hours from department electives.

Program Emphasis in Prehistoric Archaeology

The Anthropology Department features a special program emphasis in prehistoric archaeology. Students can enroll in multiple archaeology courses in order to gain a professional understanding of academic archaeology and archaeological method and theory. The department offers summer field schools where methods and techniques in archaeological analysis are refined. During summers and upon graduation, students have many opportunities to find temporary or permanent employment in the field of archaeology both in the United

States and abroad. The program has provided fieldwork and study in North America, Mesoamerica, and South America.

Anthropology (Code 46)

***Indicates course approved as diversity-focused.*

46.101 Introduction to Anthropology (3) — A beginning course for students with no background in anthropology. Provides an overview of peoples and cultures of the world today and of the past as well as the fossil evidence for human evolution. Topics may include living primates, magic and religion, and kinship, marriage, and sex roles. *Not for students who have taken 46.200, 46.210 or 46.220.*

46.102 **Anthropology and World Problems (3) — Explores the origins of global problems and evaluates the variety of cultural solutions to those problems. Investigates cultural values and solutions of tribal peoples holistically and compares them to those of industrialized nations in terms of their consequences and implications.

46.200 **Principles of Cultural Anthropology (3) — Examines a cross-cultural study of all human behaviors in contemporary cultures. Topics surveyed include socialization; language; sex, age, and kinship roles; religion and magic; marriage and the family; political and economic behavior; cultural change; and the arts. Anthropological methodology and the concept of culture also are stressed.

46.210 Prehistoric Archaeology (3) — Provides a worldwide examination of human prehistory from the origins of humankind to the development of early writing. Focuses on regional differences and similarities in key evolutionary transitions including sedentary lifeways, urban origins, and the rise of states.

46.220 Human Origins (3) — Studies the emergence and development of humans, the biological basis of human culture and society, and the origin of the social units of fossil humans.

46.260 **Men and Women: An Anthropological Perspective (3) — A cross-cultural and evolutionary perspective on sex role behavior in past and contemporary cultures. Examines sex roles are examined in nonhuman primates as well as in humans. Examines sex roles in hunting and gathering, horticultural, pastoralist, peasant, and other preindustrial societies are described as well as sex roles in modern industrial societies. Covers genetic and environmen-

tal theories of sex role behavior. *Prerequisite: 3 semester hours of anthropology*

46.290 **Race and Racism (3) — Studies race from holistic and cross-cultural perspectives. Explores biological nature of race through investigation of human evolution. Considers socio-cultural aspect through a comparative study of racial categories in cultures and societies worldwide.

46.300 Archaeological Method and Theory (3) — Explores the modern theoretical foundations of archaeology. Students read and discuss original contributions to the field and learn methods in preparation for actual fieldwork. *Prerequisite: 46.210 or consent of the instructor*

46.301 Field Archaeology (3-6) — Provides field investigation of various prehistoric cultures in northeastern United States. Students learn excavation and recording techniques, visit important sites during field trips, and become part of a unique community that studies our past.

46.310 **Aztecs and Mayans (3) — Surveys the prehistoric cultures of Mexico and Central America. Emphasis on the development of Aztec and Mayan civilizations.

46.311 Archaeology of Northeastern North America (3) — Surveys the prehistoric cultures of the area from arrival of the first inhabitants through early historic times. Provides a laboratory for the study of broader issues of socio-cultural processes. *Prerequisite: 46.210 or consent of the instructor*

46.312 **South American Archaeology (3) — A survey of prehistoric cultures of South America. Emphasizes the civilizations of the Andean zone and the role played by the Amazonian region in the development of Andean Cultures. *Prerequisites: 46.101 or 46.200 or 46.210 or consent of the instructor*

46.320 **Contemporary World Cultures (3) — Presents a comparative analysis of selected non-European societies in contrasting cultural and natural areas. Indicates stresses on the natural and social environment; national character; religion and world view; and literary, artistic, and musical expression.

46.340 Native North America (3) — Surveys native cultures of North America in prehistoric and early historic periods.

46.350 **Medical Anthropology (3) — Studies of cross-cultural concepts of health, illness,

and curing as well as health care delivery in industrialized cultures. Includes the topics of divination and diagnosis, sorcery and witchcraft in healing, public health and preventive medicine, alcoholism and drug use, and the medical knowledge of tribal and peasant societies.

46.380 Culture Change and Culture Contact (3) — Examines the modern world with emphasis on emerging new patterns of Western and international culture. Studies the impact of mass society and technology on the environment and humans, and prospects for the future. *Prerequisite: 46.200 or 46.210*

46.390 **Socialization of the Child (3) — Examines life experience and adjustment of the individual through infancy, middle childhood, and youth. Reviews contrasting methods of introducing children to adult economic, social, and religious activities. *Prerequisite: 46.200*

46.405 Primates (3) — Studies the various phenomena affecting primate behavior; ecology, social life, and socio-cultural adaption, with emphasis on the development of socio-biological traits relating to human origins. *Prerequisite: 9 semester hours of anthropology or 46.220 or any biology course*

46.410 **Anthropology of Art (3) — Studies the graphic arts, music, dance, performance, and literature of prehistoric and modern cultures that lie outside the Great Traditions of art from an anthropological perspective. *Prerequisite: Minimum of 55 semester hours or consent of the instructor*

46.440 **Language and Culture (3) — Studies the place of oral and non-oral language in human evolution and contemporary cultures. Discusses dialectal variation, discourse analysis, multilingualism, language and cognition, and the role of language in education.

46.450 **Peoples and Cultures of South America (3) — Presents a survey introduction to the aboriginal, non-literate cultures of South America including ecological background, cultural

patterns and effects of modernization on traditional culture. *Prerequisite: 46.200 or consent of the instructor*

46.466 Independent Study in Anthropology (3) — Independent study by a student with faculty guidance of a particular research problem in anthropology. The research problem either extends current course content or deals with an area not covered in the current course offerings in anthropology. A problem is chosen by the faculty member and the student working together. See section on *Independent Study*.

46.470 History of Anthropological Thought and Theory (3) — Surveys the leading methods and theories of anthropological and ethnological interpretation with special emphasis on the concept of culture and its practical application to modern problems.

46.475 Field Methods in Cultural Anthropology (3) — Provides class discussion and field experience in participatory observation. Experience in interviewing, surveying, kinship charting, mapping, studying complex organizations, and writing ethnographic field reports.

46.480 **Religion and Magic (3) — A comparative analysis of the origins, forms, elements, and symbolism of religious beliefs and behavior; the role of religion in society with particular reference to nonliterate societies. Anthropological theories and methods of religion, historical and contemporary.

46.495 Special Topics in Anthropology (3) — Provides for instruction and student research within selected areas of interest not available in other courses. *Prerequisite: 18 semester hours of anthropology or consent of the instructor*

46.497 Internship in Anthropology (3-15) — An on-site training and learning experience in anthropology that provides opportunities to apply theoretical and descriptive knowledge of archaeology, cultural anthropology, and physical anthropology in private and government institutional settings.

Department of Art

Faculty

Kenneth T. Wilson Jr., Chairperson, Professor,
Department Chairperson — B.S., Edinboro
State College; M.S., The Pennsylvania State
University

Karl A. Beamer, Associate Professor — B.S.,
Kutztown State College; M.F.A., The Penn-
sylvania State University

Carol Burns, Associate Professor — B.S., The
Pennsylvania State University; M.A., University
Of Northern Colorado; M.F.A., Cran-
brook Academy Of Art

Gary F. Clark, Associate Professor — B.F.A.,
Maryland Institute College Of Art; M.A.,
West Virginia University

Stewart L. Nagel, Professor — B.F.A., Cooper
Union; M.F.A., Pratt Institute

Andrea G. Pearson, Adjunct Faculty — B.A.,
Augustana College; M.A., University of
Iowa; Ph.D., University of California, Santa
Barbara

Christine M. Sperling, Associate Professor —
B.A., M.A., University Of Oregon; Ph.D.,
Brown University

Barbara J. Strohman, Associate Professor —
B.S., University Of Maryland; M.F.A., Mary-
land Institute College Of Art

Charles Thomas Walters, Associate Professor
— B.M., Depauw University; M.F.A., Univer-
sity Of Wisconsin; Ph.D., University Of
Michigan

Vera Viditz-Ward, Associate Professor — B.F.A.,
Hartford Art School/University Of Hart-
ford; M.F.A., Indiana University

Degree Program

Bachelor of Arts in Art

A total of 39 semester hours is required for
a major in either art history or art studio.

Goals and Objectives

The study of art requires both an inner de-
sire and a firm technical basis to support the
artist's growth throughout life. The art depart-
ment is dedicated to providing an ideal environ-
ment for the nurturing of this development
within the confines of a liberal arts education.
Art professors are committed to excellence in
teaching as well as actively involved in their own

field of expertise.

Since art is a reflection of society, a study of
the history of art is needed to place art of the
past and present in the context of our lives.
This program addresses the commonality of
visual expression among diverse cultures and
nationalities.

The studio is used as a means of giving the
student a chance to develop skills through
mediums of visual expression that will lead to
statements of personal worth. Competency is
expected within the electronic media as well
as the traditional means for students to fully
explore their expressive desires. Through ex-
plorations in the various arts, the student
should understand the richness of the working
process as a framework for the end product.
In addition to traditional academic study,
interaction with the faculty and use of facili-
ties on campus are important to the student's
development.

Required Courses for Art History

Required courses include: 24 semester
hours in art history courses; 6 semester hours
in art studio courses; 3 semester hours in ei-
ther art education, art history or art studio
courses; and 6 semester hours in a foreign lan-
guage, namely, French, German, Italian, or a
language approved by the department chair-
person.

Required Courses for Art Studio

Required courses include: 32.151, 32.152,
32.111, 32.212, 32.231, and 32.241; two cours-
es in art history courses; 9 semester hours in
either ceramics, fabric design, graphics, paint-
ing, photography, sculpture, or weaving plus 6
semester hours in elective courses in art, or 6
additional semester hours in drawing plus 9
semester hours in elective courses in art.

Minor in Art History

A minor in art history requires 15 semester
hours in art history courses plus Art 30.101 for
a total of 18 semester hours. A course in art
studio also is recommended.

Minor in Art Studio

The minor in art studio requires 15 semes-

ter hours in art studio courses, including three levels of a studio specialization, plus Art 30.101 for a total of 18 semester hours. A course in art history also is recommended.

Art (Code 30)

30.101 Introduction to Art (3) — Reviews great works of art, past and present, with an emphasis on the structure of art as determined by civilization, communication, and expression.

30.205 Children's Art (3) — Provides encounters with the art of children and ways to promote attitudes of discovery and invention, with emphasis on growth of expression.

30.303 Crafts in Special Education (3) — Presents a workshop course designed to involve students in a variety of craft experiences for different types of special learners.

30.306 Visual Arts for the Exceptional Child (3) — Stresses the importance of art activity, theory, and practice as a means of enriching and stimulating special children's awareness of themselves and their work. Emphasizes those positive aspects for creative activity that the handicapped child possesses. *Recommended for special education and psychology majors with junior standing.*

30.350 Art Education in the Elementary School (3) — Reviews theories and techniques basic to the use of art in the elementary school.

30.385 Philosophy and Psychology of Art (3) — Studies major philosophical points of view governing an understanding and criticism of the arts, past and present, together with 20th century readings in the psychology of art and content and biology of artistic form.

Art History (Code 31)

31.215 American Art History (3) — Studies the history of visual arts in America.

31.225 History of Architecture (3) — Presents a study-survey of great architectural works of the past and the present including examples of both East and West.

31.235 Ancient and Medieval Art (3) — Studies the history of the visual arts on the European continent from the prehistoric era up to and including the Late Gothic.

31.236 Art from the Renaissance Through Impressionism (3) — Studies the history of the visual arts beginning with the Italian Renaiss-

sance up to and including French painting of the 19th century.

31.345 Art History of the Near East (3) — Studies the history of the visual arts of the Islamic and the Mesopotamian worlds.

31.346 Art History of the Far East (3) — Studies the history of the visual arts of India, China, Japan, and Southeast Asia.

31.355 History of Modern Art (3) — Examines movement in art from mid-19th century France to the contemporary United States.

31.365 Italian Renaissance Art (3) — Addresses the painting, sculpture, and architecture of the Renaissance in Italy with a view toward historical and social context, patronage, and theory.

31.375 Independent Study in Art History (3) — Research and scholarship on a selected, approved topic in art history under the supervision of a faculty member, resulting in a publishable paper. See the section on *Independent Study*.

31.395 Visual Aesthetics (3) — A seminar emphasizing artistic concern with environmental relationships and theories of aesthetics and art criticism.

31.415 Primitive Arts (3) — Studies the graphic arts, music, dance performance and literature of prehistoric and modern cultures that lie outside the Great Traditions of art from an anthropological perspective.

Art Studio (Code 32)

Level I courses are open to all students.

32.111 Drawing I (3) — Examines various approaches toward drawing and explores the use of a variety of drawing materials. Studio practice and class critiques address each person's power of observation, craftsmanship, self-expression, and growth.

32.151 Three-Dimensional Design (3) — Introduction to the basic elements and principles of design such as the organization of visual elements and color, with emphasis on three-dimensional design.

32.152 Two-Dimensional Design (3) — An introduction to the basic elements and principles of design such as the organization of visual elements and color, with an emphasis on two-dimensional design.

32.195 Computer Art Graphics (3) — An in-

introductory course exploring the potential of the computer as a tool to create fine art. Stress-es images based on current computer technolo-gies and use of softwear and computers to create new kinds of image. Emphasis on new technologies as an important tool for an artist to become sensitive to his or her culture. Emphasis on using technologies with a fine arts approach.

32.201 Ceramics I (3) — Introduces the pro-cesses of making and firing ceramic objects.

32.202 Ceramics II (3) — Affords students the opportunity to become more involved by seเลcting their own methods of work. *Prerequisite:* 32.201

32.212 Drawing II (3) — Continues explora-tion of attitudes and materials stressing com-position and form. Includes work from the human skeleton and linear perspective. *Pre-requisite:* 32.111

32.221 Fabric Design I (Fall) (3) — Intro-duction to a variety of methods, approaches, tools, ma-terials, and visual concepts in designing with fibers.

32.222 Fabric Design II (Fall) (3) — Continua-tion of 32.221 with limited areas of con-cen-tration selected by each student. Professional methods, approaches, and attitudes discussed. *Prerequisite:* 32.221

32.231 Painting I (3) — Introduction to the methods, materials, and concepts of painting. Provides exploration of and increased sensi-tivity to one's environment through color.

32.232 Painting II (3) — Devotes attention to the development of the technical skill inher-ent in the formation of images. Includes the study of the landscape as a concept in paint-ing. *Prerequisite:* 32.231

32.241 Sculpture I (3) — Explores three-di-mensional artistic expression with an empha-sis on introducing a student to basic sculptural ma-terials.

32.242 Sculpture II (3) — Promotes contin-ued development in the use of materials and processes; strives for unique individual expres-sion. *Prerequisite:* 32.241

32.251 Weaving I (Spring) (3) — Provides an introduction to weaving including foot-pow-ered looms and off-loom techniques. Weaves, fibers, spinning, and looms will be part of the studio experience. *Prerequisite:* 32.152 or con-sent of instructor

32.252 Weaving II (3) — Requires a loom-con-trolled sampler plus continued experience in weaving techniques and artistic decision deal-ing with fibers. *Prerequisite:* 32.251

32.261 Graphics I: Printmaking (3) — Intro-duction to the methods, materials, and con-cepts of graphic art through exploration of basic printmaking techniques.

32.262 Graphics II: Printmaking (3) — Empha-sis on color printmaking and color registration procedures. Provides a concentration in serigra-phy and intaglio techniques. *Prerequisite:* 32.261

32.273 Design III (3) — Advanced design prob-lems undertaken stressing individualized produc-tions, involvement, and individual expres-sion through design. *Prerequisites:* 32.151, 32.152

32.275 Crafts I (3) — Introduction to a varied array of crafts, methods, tools, ma-terials, tech-niques, and artistic concepts.

32.276 Crafts II (3) — Provides a continued ex-ploration of selected in-depth crafts pro-cesses and concepts on a more professional basis. *Prerequisite:* 32.275

32.281 Photography I (3) — Introduction to black and white photography as a medium of visual expression. Technical emphasis on fundamental camera and exposure controls and introduction to darkroom printing techniques. Photographic style, composition, and theory dis-cussed. Students must have a 35mm cam-era and provide their own film and paper.

32.282 Photography II (3) — Continues ex-ploration of black and white fine art photography. Emphasis on refining exposure and printing skills. Introduces zone system metering, medium format photography, and alternative photo-graphic processes. Students must have a cam-era and provide their own film and paper. *Pre-requisite:* 32.281

32.303 Ceramics III (3) — Provides student an opportunity to specialize through the pur-suit of making an art object. *Prerequisite:* 32.202

32.304 Ceramics IV (3) — Requires students to be responsible for making, firing, and show-ing their own wares. *Prerequisite:* 32.303

32.313 Drawing III (3) — Entails studio prac-tice, outside assignments, and critiques in pur-suit of self-discovery and personal expression. Each student completes an individual project. *Prerequisite:* 32.212

32.314 Drawing IV (3) — Continues studio practice and outside assignments. Critiques stress individuality and deep involvement of personal expression. Each student pursues an individual project. *Prerequisite: 32.313*

32.323 Fabric Design III (Fall) (3) — Provides a continuation of Fabric Design II with concentration in one area selected by the student. Focus is on refining one's craft, visual perception, and professional attitude. *Prerequisite: 32.222*

32.324 Fabric Design IV (Fall) (3) — Presents a continuation of Fabric Design III with each student functioning in a highly independent and professional manner in one area. *Prerequisite: 32.323*

32.333 Painting III (3) — Provides development toward maturity of study and statement. Includes study of the figure as a concept in painting. *Prerequisite: 32.232*

32.334 Painting IV (3) — Provides advanced work planned for individual needs. Paintings are structured from experiences based on previous development. *Prerequisite: 32.333*

32.343 Sculpture III (3) — Focuses on the expansion of expression and its relationship to sculptural processes. *Prerequisite: 32.242*

32.344 Sculpture IV (3) — Enables advanced, independent work toward a maturing, personal expression in sculpture. *Prerequisite: 32.343*

32.353 Weaving III (Spring) (3) — Provides continued experience in weaving techniques with emphasis on in-depth production, two-dimensional or three-dimensional. *Prerequisite: 32.252*

32.354 Weaving IV (Spring) (3) — Develops an individualistic approach to weaving with emphasis on in-depth production. *Prerequisite: 32.353*

32.363 Graphics III: Printmaking (3) — Exploration of mixed media printmaking methods and concepts. Emphasizes photographic and lithographic techniques. *Prerequisite: 32.262*

32.364 Graphics IV: Printmaking (3) — Exploration of experimental printmaking. Emphasis on personal expression. *Prerequisite: 32.363*

32.380 Jewelry Making (3) — Studies jewelry forms, past and present, from the standpoint of both utility and design. Problems in wood and metals, ceramics, glass, and plastics, exploring contemporary jewelry forms and processes.

32.383 Photography III (3) — Requires students to develop personal photographic projects to produce during the semester. Emphasizes individual exploration of black and white photographic materials and processes. Students must provide a 35 mm camera, film, and paper. *Prerequisite: 32.282*

32.384 Photography IV (3) — Requires students to produce personal photographic projects resulting in final portfolios and an exhibition of fine art photographic prints. Students must provide a 35mm camera, film, and paper. *Prerequisite: 32.383*

32.395 Art and Culture of France (3) — Provides a study-tour of France with specific attention to French art seen in relation to its social and cultural environment. Features a new theme and visits to related areas each time course is offered. Past themes include "The Age of Francis I," "The Art of Provence," and "The Normandy Influence."

32.475 Independent Study in Studio Arts I (1-3) — Allows individualized independent study in a selected studio area. Amount of course credit awarded is determined by the instructor on the basis of the substance and depth of the project to be undertaken. See the section on *Independent Study*. *Prerequisite: Satisfactory completion of four levels of a studio area or its equivalent*

32.476 Independent Study in Studio Arts II (1-3) — Extension of 32.475 Independent Study in Studio Arts I.

32.480 Internship in Art (3-6) — Provides upper-level art majors with an opportunity to acquire meaningful experiences in practical work situations outside the regular courses prescribed by art curriculum (e.g., museum curator, designers, merchandising operations, artists).

32.490 Art Gallery (3) — Provides involvement with the collection, preservation, and exhibition of art work. Experience concludes with planning and hanging an exhibition in Haas Gallery of Art. Visits to museums and art galleries familiarize students with the varied nature and philosophy of exhibition today.

32.495 Independent Study in Art Media (3) — Stresses individual projects in the plastic arts not covered by other studio course offerings and in-depth explorations, innovative uses, and applications of selected art media. See catalog section on *Independent Study*.

Department of Biological and Allied Health Sciences

Faculty

Louis V. Mingrone, Chairperson, Professor — B.S., Slippery Rock State College; M.S., Ohio University; Ph.D., Washington State University

George P. Chamuris, Assistant Chairperson, Associate Professor — A.A.S., Dutchess Community College; B.S., State University of New York at Albany; M.S., James Madison University; Ph.D., State University of New York, College of Environmental Science and Forestry

Joseph P. Ardizzi, Associate Professor — B.S., St. Joseph's University; Ph.D., Cornell University

James E. Cole, Professor — B.A., M.A., Western Michigan University; Ph.D., Illinois State University

Judith P. Downing, Professor — B.S., Bowling Green State University; M.A., Ph.D., State University of New York at Buffalo

Phillip A. Farber, Professor — B.S., King's College; M.S., Boston College; Ph.D., Catholic University of America

John R. Fletcher, Assistant Professor — B.S., M.Ed., Bloomsburg State College

George J. Gellos, Associate Professor — B.S., Muhlenberg College; M.S., Ohio University; Ph.D., The Pennsylvania State University

Frederick C. Hill, Professor — B.S., M.S., Illinois State University; Ph.D., University of Louisville

Judith Kipe-Nolt, Assistant Professor — B.A., Messiah College; M.S., Ph.D., The Pennsylvania State University

Thomas S. Klinger, Associate Professor — A.A., Bradford College; B.A., Macalester College; M.A., Ph.D., University of South Florida

Jeanne W. Lawless, Assistant Professor — B.S., Ph.D., Cornell University

Mark S. Melnychuk, Associate Professor — B.S., Moravian College; Ph.D., Kent State University

Lynne C. Miller, Professor — B.S., College of Pharmacy, University of Rhode Island; M.S., University of Texas; Ph.D., New Mexico State University

James E. Parsons, Associate Professor — B.S., M.S., Ph.D., The Ohio State University

Casey A. Shonis, Assistant Professor — B.A., Slippery Rock University; M.S., Ph.D., University of Illinois at Champaign-Urbana

Cynthia A. Surmacz, Professor — B.S., The Pennsylvania State University; Ph.D., Milton S. Hershey Medical Center, The Pennsylvania State University

Margaret L. Till, Associate Professor — B.S., M.S., Ph.D., Auburn University

Marianna Deeney Wood, Assistant Professor — B.S., Northland College, Ph.D., University of Kansas

Degree Programs

Bachelor of Science in Biology, Bachelor of Arts in Biology

A total of 38 semester hours is required for a major in biology.

Goals and Objectives

The Bachelor of Science program in biology provides a rigorous background in biology, chemistry, physics, and mathematics. The program meets the needs of students who plan to enter graduate studies, the medical field, or professions that require in-depth preparation in the natural sciences.

In contrast, the Bachelor of Arts program allows more freedom in choosing courses and enables students to gain a broad-based background in the natural sciences. This flexibility gives students the opportunity to tailor a program to their specific interests, backgrounds, and career objectives.

Students pursuing either degree program may elect an option in microbiology. The required courses in microbiology specified under the option are identical for both programs of study.

The marine science option, which is also open to majors in both bachelor's programs, provides students with the opportunity to specialize in marine biology while obtaining a general background in the biological sciences. At least four courses, totaling 12 semester hours, must be taken at the Marine Science Center in Virginia.

Graduates in biology have entered medical,

veterinary, dental, graduate, and paramedical schools. They are employed in federal, state, and local agencies as biologists, ecologists, and naturalists. They have found employment in laboratories operated by universities, pharmaceutical companies, private industry, and government agencies. Others have gone on to earn advanced degrees in the biological or health sciences.

Recommended General Education Courses

Non-biology majors may select any biology courses designated with the 50 or 55 code in General Education Group C, Natural Sciences and Mathematics, providing they have met the prerequisites. Exceptions include those courses specifically reserved for biology/allied health students and the following: 50.205, 50.254, and 50.281-89. Suggested courses include: 50.101, 50.102, 50.110, 50.111, 50.120, 50.231, and 50.240.

Required Courses for Bachelor of Science in Biology

Biology 50.110, 50.120, 50.242, 50.271, 50.332, 50.351, 50.380; 50.371 or 50.372 or 50.475 and additional biology courses for a minimum of 38 semester hours. Chemistry 52.115, 52.131; 52.216, 52.232, and 52.341. Physics 54.111 and 54.112, or 54.211 and 54.212; Mathematics 53.141 or Psychology 48.160 and 53.123; or 53.141 or Psychology 48.160 and 53.125; or 53.125 and 53.126. Languages and Cultures at least one semester of any foreign language at the 102 level or above.

In this degree program, students may choose an option in microbiology or marine biology.

Required Courses for Bachelor of Arts in Biology

Biology 50.110, 50.120, 50.242, 50.271, 50.332, 50.351, and 50.380; 50.371 or 50.372 or 50.475; and additional biology courses for a minimum of 38 semester hours. Chemistry 52.115, 52.131; 52.216 and 52.341. Mathematics (6 hours); two of the following: Mathematics 53.141 or Psychology 48.160; Mathematics 53.123 or 53.125; Computer Science 56.100. Languages and Cultures at least one semester of a foreign language at the 102 level or above.

In this degree program, students may choose an option in microbiology or marine biology.

Microbiology Option

The option provides a biology major the opportunity to specialize in microbiology while obtaining a general background in biology. The option is also open to medical technology majors; see the section on *Medical Technology*. The requirements for this option are the same for the Bachelor of Science program as they are for the Bachelor of Arts program.

Biology 50.110, 50.120, 50.271, 50.332, 50.351, 50.380; 50.371 or 50.372 or 50.475.

Microbiology 50.242, 50.342, and 50.343.

Electives (9 semester hours) Choose from: 50.350, 50.432, 50.442, 50.450, 50.455, or 50.470.

Marine Biology Option

This option provides the biology major with the opportunity to specialize in marine biology while obtaining a foundation in the fundamental principles of biological science. Program specific courses in marine biology are offered at the Marine Science Center, Wallops Island, Va., a field station supported by the department. See Marine Science, code 55, for course descriptions.

Biology: 50.110, 50.120, 50.242, 50.271, 50.332, 50.380, 50.371 or 50.372 or 50.472.

Marine Biology: 55.221, 55.241, 55.260

Electives (3 to 9 semester hours): 55.250, 55.298, 55.300, 55.320, 55.330, 55.334, 55.342, 55.343, 55.344, 55.345, 55.431, 455.441, 55.491, 55.492

Minor in Biology

The minor in biology consists of 22 semester hours. Required courses are: 50.110, 50.120, 50.242, 50.271, and at least two courses (6 semester hours) at the 300-level or above that are chosen from departmental offerings acceptable to the major. These may not include: 50.279, 50.380, 50.390/50.391 Independent Study in Biology I and II, 50.479 50.490, 50.493 and 50.494.

Allied Health

Curricula for medical technology, radiological technology, pre-physical therapy, pre-occupational therapy, pre-cytotechnology, and health services associate are detailed in the sections on *Medical Technology*, *Radiological Technology*, *Allied Health* and *Health Services*.

Cooperative Education/Internship/Independent Study

The department provides opportunities for students to engage in cooperative education, internships, and independent study. Only 6

semester hours can be applied as biology electives from the following courses: 50.279, 50.390, 50.391, 50.479, 50.490, 50.493 and 50.494.

Biological and Allied Health Sciences (Code 50)

Courses described at the top of this group are for biology majors; courses for non-biology majors are shown at the end;

50.110 Biology of Animals (4) — Introduces fundamental principles of zoology as applied to representative groups of animals. Laboratory work emphasizes comparative development, anatomy, physiology, and behavior of representative animals. *Three hours lecture/3 hours laboratory per week*

50.120 Biology of Plants (4) — Introduces fundamental principles of taxonomy, anatomy, morphology, physiology, and genetics as applied to the plant kingdom. *Three hours of lecture/3 hours laboratory per week*

50.211 Invertebrate Zoology (3) — Studies the principal phyla of invertebrate animals in relation to their anatomy, classification, and behaviors in the ecosystems in which they participate. Field trip component at Marine Science Consortium, Wallops Island, Va., includes additional student costs. *Three hours lecture/2 hours laboratory per week. Prerequisite : 50.110*

50.212 Vertebrate Zoology (Fall) (3) — Studies the biology of vertebrate animals, emphasizing natural history, physiology, morphology, and behavior. Reviews evolutionary and ecological aspects of each class. Includes laboratory work with living and preserved specimens to familiarize students with representative individuals of the major classes of this group. Field trip component at the Marine Science Consortium, Wallops Island, Va., includes additional student costs. *Two hours of lecture/3 hours of laboratory per week. Prerequisite: 50.110*

50.221 Comparative Biology of Nonvascular Plants (3) — Provides a phylogenetic study of major nonvascular plants with an emphasis on development, structure, reproduction, and selected ecological aspects. *Two hours lecture/3 hours laboratory per week. Prerequisite: 50.120*

50.222 Comparative Biology of Vascular Plants (3) — Provides a phylogenetic study of major vascular plants with emphasis on their development, structure, reproduction, and selected ecological and paleobotanical aspects. *Two*

hours of lecture/3 hours of laboratory per week. Prerequisite: 50.120

50.233 Human Genetics (3) — Explores the principles of human genetics and their application to problems in anthropology, biology, medicine, psychology, sociology, and special education. *Three hours of lecture/discussion per week. Prerequisite: 50.101, 50.110, or 50.120 or consent of the instructor*

50.242 Biology of Microorganisms (4) — Introduces the fundamental principles of nomenclature, classification, microscopy, cytology and anatomy, cultivation, growth, metabolism, and genetics of the microbial world. Microbial interrelationships and control are integrated into a systematic approach to classical microbiology as it relates to humans and the environment. *Three hours of lecture/3 hours of laboratory per week.*

50.252 Field Zoology (*Summer/odd-numbered years*) (3) — Studies common vertebrates (excluding birds) of North America with emphasis on observation, collection, and recognition of local fauna. *Two hours of lecture/3 hours of laboratory per week. Prerequisite: 50.110 or consent of the instructor*

50.253 Freshwater Biology (*Summer*) (3) — Emphasizes the chemical, physical, and biological aspects of freshwater environments. *Two hours of lecture/3 hours of laboratory per week. Prerequisites: 50.110 and 50.120 or consent of the instructor*

50.263 Field Botany (*Summer/even-numbered years*) (3) — Addresses identification and classification of seed plants represented in local flora. *Two hours of lecture/3 hours laboratory per week. Prerequisite: 50.120 or consent of the instructor*

50.271 Cell Biology (4) — Examines the structure and function of the cell and its organelles. Emphasis on general principles and processes by which all cells function. *Three hours of lecture/3 hours of laboratory per week. Prerequisites: 50.110 or 50.120 and 52.115 or 52.118.*

50.279 Cooperative Education in Biology and Allied Health Sciences (3-6) — A work-study program open to students majoring in the biological sciences with a minimum of 32 semester hours earned. Differs from internship 50.490 in that Cooperative Education must be paid and is a two-opportunity experience, with the first experience generally undertaken soon after 32 credits are earned. The two experiences may total from 9 to 12 hours since one of the two must be fulltime (equivalent to 6 se-

mester hours) and the second may be part time (3 semester hours) or full time. No more than 15 semester hours in cooperative education and/or internship may be taken. Refer to the section on cooperative education, internship and independent study. *Prerequisite: Open only to students majoring in the biological sciences who have earned at least 32 semester hours*

50.290 Writing in Biology (3) — Provides experience in types of communication useful in a natural science with a basis in experimentally acquired information. Emphasizes types of written communication; includes oral presentations. *Prerequisites: English 20.101 or 20.104 and completion of two biology courses (50.110, 50.120 or 50.242). Word processing skills are highly recommended*

50.331 Embryology (Spring/even-numbered years) (3) — Reviews the patterns, processes, and principles of animal development. Laboratory studies emphasize descriptive embryology of a number of representative vertebrates with emphasis on amphibian, avian, and mammalian development. Field trip component at Marine Science Consortium, Wallops Island, Va., includes additional student costs. *Two hours of lecture/3 hours of laboratory per week. Prerequisite: 50.110 or consent of the instructor*

50.332 Genetics (3) — Addresses mechanisms of heredity in animals and plants; Mendelian inheritance, linkage, probability, crossing over, chromosomal modifications, nucleic acids, and gene action. *Three hours of lecture/2 hours of laboratory per week. Laboratory hours will vary. Prerequisite: 50.271*

50.342 Medical Bacteriology (4) — Provides a study of bacteria capable of causing disease in humans. Emphasizes laboratory aspects of bacterial disease but includes pathogenicity, identification, diagnosis, treatment, and prevention. *Three hours of lecture/3 hours of laboratory per week. Prerequisites: 50.242 and 50.271*

50.343 Immunology (3) — Introduction to components and functions of human immune system; application of immunology to infectious disease, blood transfusion, organ transplantation, and cancer; consideration of conditions involving the immune system such as immunodeficiencies (AIDS), allergies, and autoimmune diseases. *Prerequisites: 50.271; and a background in genetics, organic/biochemistry, and/or infectious diseases recommended*

50.350 Plant Pathology (3) — Examines the nature of vascular plant diseases, the biology

of plant pathogens, and the impact of diseases on human affairs. Lecture stresses principles of plant pathology: disease and pathogen classification, modes of pathogenesis, host response to disease, and disease control. Laboratory stresses identification of plant pathogens and disease symptoms, histology of diseased tissues, and research techniques. *Three hours of lecture/2 hours of laboratory per week. Prerequisites: 50.242 and 50.271; or consent of the instructor*

50.351 General Ecology (3) — Introduces principles and concepts pertaining to energy flow, limiting factors, habitat studies, succession patterns, and population studies at the species, interspecies, and community level. Field trip component at the Marine Science Consortium, Wallops Island, Va., may incur additional student costs for food and lodging. *Two hours lecture/3 hours laboratory per week. Prerequisite: 50.110 or 50.120 or consent of the instructor*

50.361 Comparative Vertebrate Anatomy (Spring/odd-numbered years) (3) — Presents a comparative study of the chordates emphasizing the vertebrate classes. Attention given to structure, morphogenesis, functional adaptations, and evolutionary trends. Laboratory emphasis is placed on the lamprey, shark, and cat. Field trip component at Marine Science Consortium, Wallops Island, Va., includes additional student costs. *Two hours of lecture/3 hours of laboratory per week. Prerequisite: 50.110 or consent of the instructor*

50.364 Vertebrate Histology (3) — Studies the structure and function of vertebrate cells and tissues from various body systems. Laboratory studies include the use of prepared microscope slides and color photomicrographs. *Two hours lecture/3 hours laboratory per week. Prerequisite: 50.271 or consent of instructor*

50.365 Histological and Histochemical Techniques (3) — Provides theory and practice in the use of histological and histochemical techniques in a laboratory format. Fixation, preparation embedding, sectioning, and staining of various animal tissues. *One hour lecture/4 hours laboratory per week. Prerequisites: 50.364 or Chemistry 52.131 recommended or consent of the instructor*

50.371 Principles of Mammalian Physiology (4) — Studies principles of cell physiology that are basic to the function of the following mammalian tissue and systems; blood, metabolic, neuromuscular, cardiovascular, and urinary. Neural and chemical processes of the aforementioned are emphasized. *Three hours of lecture*

ture/3 hours of laboratory per week. Prerequisites: 50.271 and Chemistry 52.131, and 52.216, or consent of the instructor. A background in organic chemistry and algebra and, at least, Sophomore standing recommended.

50.372 Plant Physiology (Spring) (3) — An introduction to plant function including discussions of water relations, carbohydrate metabolism and translocation, photosynthesis, mineral nutrition, plant growth hormones, and growth and development. Three hours lecture per week. Prerequisites: 50.120 and 50.271; Chemistry 52.131 or 52.216 or consent of the instructor

50.380 Biology Seminar (1) — Emphasizes preparation and presentation of biological topics in both oral and written formats. Prerequisite: Junior standing or minimum of 64 semester hours completed

50.390 Independent Study in Biology I (1-3) — Acquaints students with techniques of scientific research, data collection, and analysis by engaging in a program of research with the aid of a faculty member. Research culminates in a scholarly paper written by the student that presents findings of the laboratory or field investigation in a form suitable for publication. Refer to section on cooperative education, internship and independent study Prerequisite: Junior standing

50.391 Independent Study in Biology I (1-3) — Acquaints students with techniques of scientific research, data collection, and analysis by engaging in a program of scientific research with the aid of a faculty member. See section on *Independent Study*. Prerequisite: 50.390

50.411 Radiation Biology (3) — Studies the effects of radiation on living organisms; nuclear structure; fundamental properties of radiation; physical, chemical, and genetic effect on plants and animals from cells to whole organisms; the application of radiochemicals in biological studies. Prerequisites: 52.216, and Physics 54.112 or 54.212 or consent of the instructor

50.430 Evolution (3) — Studies the major concerns of the theory of evolution and contributions toward their solutions made by genetics, paleontology, systematics, and ecology. Three hours of lecture per week. Prerequisites: 50.110 or 50.120; 50.332 recommended

50.432 Microbial Genetics (3) — A genetic analysis of microbes to provide insights into the molecular basis of gene action using viruses, bacteria, and lower eukaryotes. Topics include DNA and genetic recombination, plas-

mids, transposons, and recombinant DNA. Two hours of lecture and 3 hours of laboratory per week. Prerequisites: Consent of the instructor or two courses from 50.242, 50.332, and Chemistry 52.341

50.441 Cytogenetics (3) — Examines structure and behavior of chromosomes and their effects on development. Describes human genetic syndromes and the effects of chromosome abnormalities. Explores relationships between chromosomes, oncogenes, and cancer. Laboratory studies include cell culture methods, microscopic techniques, and karyotype preparation. Two hours of lecture/2 hours of laboratory per week. Prerequisites: 50.233 or 50.332 and 50.271; or consent of the instructor

50.442 Virology of Mammals (3) — Introduces viral structure, classification, replication, genetics, and pathogenesis. Studies entail the diagnosis, prevention, and treatment of viral infection, and families of viruses that cause disease in humans and other mammals. Includes such current topics as AIDS and tumor virology. Prerequisites: At least one course from 50.332, 50.342, 50.343, Chemistry 52.341; background in microbiology recommended

50.450 Mycology (3) — A critical survey of the kingdom Fungi, with emphasis on the Ascomycota, Basidio-mycota, and Deuteromycota. Lectures cover the topics of morphology, physiology, biochemistry, cytology, genetics, systematics, ecology, and evolution. Laboratory stresses comparative morphology of higher fungi, laboratory techniques, and field mycology. Two hours of lecture/3 hours of laboratory per week. Prerequisites: 50.271; one course in genetics recommended; or consent of the instructor

50.455 Environmental Microbiology (3) — Aspects of applied microbiology as related to some fundamentals of public health, food contamination, water pollution, and sanitation. Emphasis on related laboratory testing procedures. Four hours per week. Additional time may be required. Prerequisite: 50.242

50.457 Entomology (Summer) (3) — Studies the physiology, morphology, behavior, classification, and general biology of the insects. A collecting period will provide an opportunity for students to collect, mount, and properly display insects for study. Taxonomic emphasis limited to order and family. Equivalent to a minimum of 5 hours per week including laboratory. Prerequisite: 50.110

50.458 Fungal Ecology (3) — A broad treatment of the ecology of fungi, examination of

such topics as fungal decomposition of wood and bark, fungal decomposition of forest litter, ecology of aquatic fungi, community structure of soil and/or dung fungi, ecology of predaceous fungi, and aspects of mycorrhizal symbioses. Topics vary with each semester. Laboratory includes field component and stresses demonstration of basic principles, testing existing and formulating new hypotheses, and research techniques. *Two hours of lectures/3 hours of laboratory per week.* Prerequisite: 50.351 or concurrent enrollment or consent of the instructor

50.459 Ornithology (3) — Studies the biology of birds including bird identification in the field by song and sight. Studies birds of this region in relation to migration, time of arrival, and nesting. Two hours of lecture/3 hours of laboratory per week. Some study off-campus may be required. The field trip component at Marine Science Consortium, Wallops Island, Va., includes additional student costs. Prerequisite: 50.110 or consent of the instructor

50.461 Animal Behavior (3) — In depth introduction to modern ethology. Emphasizes current models of animal behavior and theoretical foundations of ethology. Research and project oriented. Students may incur additional cost due to the field trip component at Marine Science Consortium, Wallops Island, Va. *Three hours of lecture/2 hours of laboratory per week*

50.462 Plant Anatomy (3) — Outlines recent concepts of plant anatomy and historical consideration of classical researchers. Reviews the structure, function, growth, and morphogenesis of the vascular plants. Addresses composition and growth of meristems and the phenomena of subsequent tissue differentiation. Describes anatomical organization by developmental and comparative methods in order to explain important cell, tissue, and organ relationships. *Two hours of lecture/3 hours of laboratory per week.* Prerequisite: 50.120

50.463 Biological Photographic Techniques (3) — Presents theory and practice of photography as applied to biology including negative and printmaking, gross specimen photography, copying, transparencies, film strips, autoradiography, nature work in close-ups, photomicrography, thesis illustration, and other special techniques. *Two hours of lecture and 3 hours of laboratory per week. Additional laboratory hours may be required.* Prerequisite: Open only to majors in biology or allied health with at least Junior standing

50.470 Medical Parasitology (3) — Presents life history, physiology, taxonomy, and mor-

phology of parasites of medical importance to humankind. Special attention given to clinical aspects such as pathology, symptomatology, diagnosis, prevention, and treatment. Laboratory work stresses identification of parasitic disease through living and preserved material, the proper handling of specimens, and methods of professional patient interviewing. *Five hours per week.* Prerequisite: 50.110 and Chemistry 52.131 or 52.216, or consent of the instructor. Completion of additional coursework in biology recommended

50.473 Systemic Physiology (3) — Examines how normal body function is maintained by the precise control and integration of the specialized activities of the various organ systems. Three hours of lecture/ 2 hours of laboratory per week. Prerequisite: 50.371 and Chemistry 52.216 or 52.232 or consent of the instructor. A background in algebra recommended.

50.475 Cell Physiology (3) — Applies physical and chemical principles to cellular processes, biochemistry or cellular constituents, physicochemical environment, bioenergetics, and intermediate metabolism. Three hours lecture and discussion per week. Prerequisites: 50.271 and 6 semester hours of biology; Chemistry 52.216 or 52.232 or consent of the instructor

50.479 Cooperative Education in Biology and Allied Health Sciences (3-6) — A work-study program open to biological science majors who have completed 50.279. Differs from Internship 50.490 in that Cooperative Education must be paid and is at least a two-opportunity experience. The two cooperative education experiences may total from 9 to 12 semester hours since one of the two must be full-time (equivalent to 6 semester hours), and the second may be part-time (3 semester hours) or full-time (6 semester hours). No more than 15 semester hours in Cooperative Education and/or internship may be taken. Refer to section on cooperative Education, internship, independent study. Prerequisite: 50.279

50.481-489 Advanced Special Topics, Biology/ Allied Health Sciences (3) — Presents an area of biology or allied health which requires the student to have some background in biology. Three semester hours may be applied to a biology major. Prerequisite: Determined by the instructor

50.490 Internship in Biology and Biology Research (3-15) — A work-study program open only to juniors and seniors majoring in biology and allied health sciences. No more than

15 semester hours in Cooperative Education and/or internship may be taken. Refer to section on cooperative Education, internship, independent study.

50.493 Honors Independent Study I - Biological Research (3) — Consists of a laboratory or field investigation of a particular problem or topic in biology. The study will be conducted under the supervision of a biology faculty member. The course is open to students enrolled in the B.A. and B.S. in biology degree programs. Refer to section on cooperative education, internship and independent study. *Prerequisite: 50.380 and admission to the Honors Program*

50.494 Honors Independent Study II - Biological Research (3) — Consists of a laboratory or field investigation of a selected problem or topic in biology. The study will be conducted under the supervision of a biology faculty member. This course completes the requirements for Biology Honors research. Refer to the section on cooperative education, internship and independent study. *Prerequisite: 50.493*

Courses not applicable to biology major

50.101 General Biology I (3) — Presents major concepts and principles of biology relating to humans. Lecture and discussion.

50.102 General Biology II (3) — Studies biology from the ecological, evolutionary, and behavioral perspective with emphasis on humankind. *Prerequisite: 50.101*

50.107 Medical Terminology (1) — Studies roots, prefixes, and suffixes of medical terms via programmed instruction. *Recommended for students in the health sciences. Pass/fail credit only*

50.111 General Biology Laboratory (1) — Offers "hands-on" experience emphasizing biological concepts. *Two hours laboratory per week. Prerequisite: 50.101 or concurrent*

50.173 Anatomy and Physiology I (4) — An introductory course integrating the structure and function of the human body. Covers fundamental principles of anatomy and physiology, the chemical basis of life, cell structure and function, tissues, integumentary system, skeletal system, muscular system, nervous system, and special senses. *Three hours of lecture/3 hours of laboratory per week.*

50.174 Anatomy and Physiology II (4) — Introductory course integrating the structure and function of the human body. Covers blood and defense mechanisms, cardiovascular system, lymphatic system, respiratory system, digestive

system, metabolism, nutrition, urinary system, fluid and electrolyte balance, endocrine system, reproductive system, growth and development, and human genetics. *Three hours lecture/3 hours laboratory per week. Prerequisite: 50.173 or consent of the instructor*

50.205 Introduction to Nutrition (3) — A foundation of nutritional concepts and practices that can be applied to personal lives and incorporated into careers. Concepts include nutritional requirements for optimal health and performance throughout the life span, making food choices in the marketplace, analyzing nutritional information in the media, and controversial issues in nutrition and health.

50.231 Biology of Aging (3) — The biological mechanisms of the aging process are discussed with special emphasis on these processes in humans. Discussions include studies of aging at the molecular, cellular, systems, and organism levels of organizations. *Three hours lecture per week.*

50.240 Introductory Microbiology (3) — Presents elementary aspects of morphology, metabolism, and cultivation of bacteria, viruses, and other microorganisms with consideration of their relationship to public health and various industrial processes. *Two hours lecture and 2 hours laboratory per week*

50.254 Social Implications of Biology (3) — Explores the societal implications of current thought in biology. Addresses values, ethics, and responsible decision making. *Three hours of lecture and discussion per week.*

50.366 Anatomy and Physiology: Head, Neck, and Thorax (Spring) (3) — Focuses on the anatomy, physiology, and development of the head, neck, and thorax. Emphasizes the organ systems that relate to the hearing and speech mechanisms. *Three hours lecture/2 hours laboratory per week. Preference given to students in communication disorders*

Marine Science

Marine science courses are offered in the summer at the Marine Science Center near Wallops Island, Va. Courses in biology are offered by the Marine Science Center to satisfy requirements for the marine biology option and are acceptable as elective credit for biology majors. For more information, contact the adviser to the marine biology option. For related marine science courses, see the listing

under the catalog section on *Earth Science/Geology*.

Marine Science (Code 55)

55.221 Marine Invertebrates (3) — A study of the life, history, habits, origin, development, physiology, anatomy, and taxonomy of the main phyla of invertebrates. A phylogenetic sequence is followed to show interrelationships among the phyla. Special emphasis is given to the Atlantic marine invertebrates. Laboratory and field work deal with collection, preservation, and identification of local species. *Prerequisite: 50.110, 50.120 or consent of the instructor*

55.241 Marine Biology (3) — A study of plant and animal life in the marine environment. Emphasis on physical and chemical environmental factors affecting the biota in the intertidal, open water, and benthic habitats. Common biota characteristics of each habitat will be investigated in terms of their natural history, morphology, and ecological relationships. *Prerequisite: 50.110, 50.120 or consent of the instructor*

55.250 Wetland Ecology (3) — Structure and function of wetland ecosystems with special emphasis on coastal wetlands. Considers the impact of humans on wetlands and ecological approach toward their management. Laboratory consists of field exercises in the study of wetlands. *Prerequisites: 50.110, 50.120*

55.260 Marine Ecology (3) — Interrelationships among animals, plants, and physical and chemical aspects of the environment studied, with stress on adaptations for survival that are unique to the marine environment

55.298 Physiology of Marine Invertebrates (3) — Mechanisms and regulation of organ function in marine invertebrates with emphasis on homeostasis. Invertebrate examples of fundamental principles and unique mechanisms. *Prerequisites: 50.110, 50.120*

55.300 Behavior of Marine Organisms (3) — Concepts of ethology; discussion and observation of the influence of external and internal factors on the regulation; and control of behavior of organisms living in the marine coastal environment. *Prerequisite: 50.110*

55.320 Marine Microbiology (3) — A survey of methods and concepts of marine microbiology. Focus on the technical aspects of sample collection, microbial ecology of the marine

environment, enrichment culturing, and methods of enumeration and identification with emphasis on marine bacteria. *Prerequisite: 50.110, 50.120*

55.330 Tropical Invertebrates (3) — Introduction to tropical invertebrates, using a variety of collection and observation methods to sample nearshore and reef areas. Emphasis on systematics and ecology using the communities approach. One week at Wallops Island, Va., for intensive review of general systematics and ecology of marine invertebrates; then two weeks in Florida sampling and identifying species and describing ecological communities. Course is a sequel to marine invertebrates or a landlocked invertebrate zoology course or a thorough landlocked zoology course. *Prerequisites: 55.221 or 50.211*

55.334 Marine Embryology (3) — Principles of development and differentiation in marine organisms at the molecular and supramolecular levels of organization. Laboratory includes both descriptive and experimental embryology. *Prerequisite: 50.110, 50.120*

55.342 Marine Botany (3) — Taxonomy, physiology, ecology, and economic importance of marine and coastal plants as exemplified by those found on the Delmarva Peninsula. Laboratory techniques include collecting, preserving, identifying, and analyzing plants and plant materials, appropriate instrumentation to be used. Emphasis on in-the-field studies and laboratory analyses. *Prerequisites: 50.110, 50.120*

55.343 Marine Ichthyology (3) — A study of the internal and external structure of fishes, their systematic and ecological relationships, and their distribution in time and space. *Prerequisite: 50.110, 50.120*

55.344 Anatomy of Marine Chordates (3) — Familiarization with qualitative aspects of speciation. Establishment of understanding of basic and specialized structure and development of marine chordates. Tracing of important trends (and their functional significance) in the evolution of this structure in various vertebrate lines in which there was radiation to or from a marine environment. Laboratory work involves dissection of freshly collected (and preserved) representative marine vertebrates. *Prerequisites: 50.110, 50.120*

55.345 Ornithology (3) — Introduces avian fauna of the sea coast and enables comparison with inland species. Field work provides visual and vocal identification; lecture material in-

cludes information on distribution, behavior, physiology, and anatomy of birds. *Prerequisites:* 50.110, 50.120

55.431 Ecology of Marine Plankton (3) — Study of the phytoplankton and zooplankton in marine and brackish environments. Qualitative and quantitative comparisons made between planktonic populations of various types of habitats in relation to primary and secondary productivity. *Prerequisites:* 50.110, 50.120

55.441 Biology of Molluscs (3) — An evolutionary, functional and ecologic approach to studying the second largest group of animals and perhaps the most diverse in terms of morphological, ecological and behavioral variations. *Prerequisites:* 50.110, 50.221 recommended

55.491 Coral Reef Ecology (3) — A study of

coral reef structure, formation, types and relationships of reef organisms to their environment. Emphasis on species diversity, identification, symbioses and effects of temperature, salinity, light, nutrient concentration, predation and competition on the abundance and the distribution of coral reef organisms. *Prerequisites:* 50.110, 50.120 and SCUBA and/or snorkeling experience

55.492 Marine Mammals (3) — Study of the distribution, population, ecology, behavior, physiology and adaptations of marine mammals. Students collect physiological and behavioral data at field sites and facilities studying marine mammals. *Prerequisites:* 50.110, 50.120, 50.212 or 50.361 recommended; preferences given to senior students in registering

Department of Finance and Business Law

Faculty Credentials

- David G. Heskel, Chairperson, Associate Professor — M.B.A., Ph.D., University of Business, Vienna, Austria
Barbara E. Behr, Professor — A.B., Cornell University; M.A., Hunter College; J.D., Rutgers Law School
Karen J. Elwell, Associate Professor — A.B., A.M., J.D., University of Illinois at Urbana-Champaign
David G. Martin, Associate Professor — B.A., C. W. Post College; M.B.A., Western Illinois University; Ph.D., University of Alabama
Bruce L. Rockwood, Professor — B.A., Swarthmore College; J.D., University of Chicago Law School
W. Steven Smith, Associate Professor — B.S., M.B.A., University of Georgia; M.A., The Ohio State University; Ph.D., University of Alabama

Degree Program

Bachelor of Science in Business Administration A total of 63 semester hours is required for a major in business administration-economics. Other majors in this degree program include accounting, finance, management information systems, management, and marketing.

Goals and Objectives

The major in business administration-economics provides a perspective of the domestic and international economic system on the Macro and Micro levels and the influence it exerts on the decision-making process of financial markets and institutions. This major provides students with educational opportunities that prepare them for careers in the domestic and international economic fields.

Required Courses

A total of 18 semester hours is required for

a major in business administration-economics. Required courses include: Economics 40.311, 40.312, 40.313, and 40.422 or 40.423; economics elective and business elective.

Courses required for the degree program in business administration include: Economics 40.211, 40.212, 40.246, and 40.346; Mathematics 53.118; Accounting 91.220 and 91.223; Computer and Information Systems 92.150; Management 93.344, 93.445, and 93.446; Finance 96.313; Marketing 97.310; and Business Law 98.331.

Elective Courses

Students may select courses in business and economics to complete a minimum of 63 semester hour. Courses designated with a 91, 92, 93, 96, 97, or 98 prefix are business courses and those with a 40 prefix are economics courses. Additional courses permitted as electives include: Speech Communication 25.307; History 42.223 (a substitute for 42.224 and 40.423), 42.472; and General Business 90.101, 90.241, 90.431, and 90.432.

Note: 90.101 will not be allowed as a business elective once a student has completed 6 semester hours in business administration courses.

In selecting an elective, the student must have the proper prerequisites and avoid elected courses below that level for which the student has already been prepared in that subject field.

General Education Courses

English 20.101 and 20.201 are required as general education courses.

Free Electives

Select free electives to satisfy the 128 semester hours required for graduation.

Department of Business Education and Office Administration

Faculty

Roger W. Ellis, Chairperson, Associate Professor — B.S., M.Ed., Bloomsburg State College; Ed.D., Arizona State University

Ellen M. Clemens, Associate Professor — B.S., M.Ed., Bloomsburg State College; D.Ed., The Pennsylvania State University

Donna J. Cochrane, Professor — A.A.S., Dutchess Community College; B.S., M.S., State University of New York at Albany; Ed.D., Temple University

Nancy A. Dittman, Associate Professor — B.S., Florida State University; M.Ed., University of Florida; Ed.D., University of Colorado

Dennis O. Gehris, Associate Professor — B.S., M.A., Rider College; Ed.D., Temple University

Janice C. Keil, Assistant Professor — B.S., M.Ed., Bloomsburg State College; Ed.D., Temple University

John J. Olivo Jr., Professor — B.S., Davis and Elkins College; M.Ed., Trenton State University; Ph.D., Michigan State University

Degree Program

Bachelor of Science in Education

A total of 74 semester hours is required for a major in business education.

Goals and Objectives

The business education curriculum provides specialized knowledge and skills to prepare graduates for certification for secondary teaching, positions as training managers for business and government, and advanced study in business education and related fields.

Admission to Teacher Education

Students who are admitted as business education majors must apply for acceptance to teacher education upon completion of 65 or more semester hours. For information about admission to teacher education, contact one of the department faculty.

Required Courses

General Business 90.101 and 90.333; Accounting 91.221; Computer and Information Systems 92.150; Management 93.344; Office

Systems 94.221, 94.302, 94.401, 94.403 and 94.405; Business Law 98.331.

Elective Courses

Students must choose at least 3 semester hours from General Business 90.234, General Business 90.341 and Office Systems 94.330.

General Education Courses

The following general education courses are required with a grade of C or better: English 20.101 and 20.201; Speech Communication 25.103; Economics 40.211 and 40.212; Mathematics 53.141 or Psychology 48.101 and 48.160; and Special Education 70.101. Other required general education courses include 3 semester hours in values, 3 semester hours in fitness and recreation, 12 semester hours in natural sciences and mathematics and 12 semester hours in humanities and the arts.

Professional Education Courses

The student must have completed the following courses with a grade of C or better to be considered for certification as a teacher of business subjects:

Educational Foundations 60.201, 60.251 or Psychology 48.251, 60.393 or 60.394
7 semester hours

Secondary Education 65.374
3 semester hours

General Business 90.402, 90.403, 90.404,
90.406
19 semester hours

Areas of Certification

Upon completion of the curriculum, receipt of a recommendation from the university, and successfully passing the National Teachers Examination, the graduate will be issued an Instructional Level I Certificate by the Pennsylvania Department of Education. Every certification indicates at least two subject areas of which Office Technologies is always one.

Students must complete each course in the certification area with a grade of C or better. Areas of certification in business education include:

Accounting — Accounting 91.222, 91.223,
and 91.321

Data Processing — Computer and Information Systems 92.177, 92.251, and 92.254.
Marketing — General Business 90.341 and Marketing 97.310 and 97.430
Office Technologies — Office Systems, 94.302, 94.401, and 94.403
This certification area is required for all business education majors.

General Business (Code 90)

90.101 Introduction to Business (3) — Provides a study of business and its environment, organization, operation, and interrelationships with government and society. Business majors develop a broad base for further study in a specific area in business, while other majors become familiar with the American enterprise system and the functions and issues facing business today. *Prerequisite: Not open to business administration degree students with 6 or more semester hours in business*

90.234 Business Mathematics (3) — Covers concepts and principles of basic business operations and mathematics as it relates to accounting, retailing, and finance. *Prerequisite: Not open to business administration degree students with 6 or more semester hours in business*

90.333 Business Communications and Report Writing (3) — Applies theories and principles of effective communication to the solving of common business problems. Psychological and organizational strategies are used in the writing of business reports and other documents. Use of microcomputer software encouraged. *Prerequisite: Junior or Senior standing*

90.341 Principles of Selling (3) — Includes a study of selling as a profession, preparation for successful selling, steps and procedures associated with the sales process, and special selling topics. Students apply sales principles and techniques while conducting sales presentations.

90.402 Methods of Teaching Business Education (3) — Emphasizes a variety of methods and materials for teaching certification areas of business education. Must be scheduled the semester prior to student teaching and concurrently with 90.403. Classroom discussions closely correlate with the experiences of

90.403. *Prerequisite: Admission to teacher education*

90.403 Business Education Field Experience (1) — Initiates an awareness of the teaching and learning atmosphere of the professional teacher in the classroom. Students provided opportunities to undertake the responsibilities assigned to a classroom teacher, including assuming some of the teaching role competencies. Must be scheduled the semester prior to student teaching. *Prerequisite: Admission to teacher education*

90.404 Professional Semester in Business Education (12) — Includes orientation experiences to observe the operation of a school and specific classes as well as 16 weeks of participatory teaching experiences correlated with classroom studies under full-time supervision. Must be scheduled concurrently with 90.406 Clinical Studies in Business Education.

90.406 Clinical Studies in Business Education (3) — Presents seminars on principles of education for business teachers, methods of teaching business subjects, strategies, and problems of classroom teaching. Classroom discussions closely correlated with the experiences of 90.404.

90.431 Independent Study in Business (1-3) — Topic and outline of project must be approved by the department chairperson and dean of the college. *Prerequisite: Open to seniors only*

90.432 Internship in Business (1-6) — Provides students with opportunities to acquire practical experiences in work situations in office systems. *Prerequisites: Approval by department chairperson; QPA of 2.50 and 80 semester hours earned*

90.460 Business and Office Workshop (1-3) — Students acquire an awareness and understanding of the knowledge pertaining to the professional development and improvement of business skills, the enhancement of business and office education as a professional responsibility, and their role in the business world.

90.498 Special Topics in Business Education and Office Systems (1-3) — A study of the aspects of business education or office systems. *Not available as a regular course offering.*

Department of Chemistry

Faculty

Lawrence L. Mack, Chairperson, Professor — A.B., Middlebury College; Ph.D., Northwestern University

Wayne P. Anderson, Professor — A.A.S., Jamestown Community College; B.A., Harpur College; M.S., Ph.D., University of Illinois

Barrett W. Benson, Professor — A.B., Middlebury College; Ph.D., University of Vermont

Michael A.G. Berg, Assistant Professor — B.S., Washington and Lee University; Ph.D., Virginia Polytechnic Institute and State University

Harold N. Fonda, Assistant Professor — B.S., University of Nottingham (England); Ph.D., Michigan State University

Christopher P. Hallen, Associate Professor — B.A., Assumption College; Ph.D., University of New Hampshire

Roy D. Pointer, Professor — B.S., University of Kansas; M.S., Ph.D., University of Michigan

Michael E. Pugh, Associate Professor — B.S., University of California, Davis; Ph.D., Arizona State University

Emeric Schultz, Associate Professor — B.A., University of California; Ph.D., University of Illinois

Bruce E. Wilcox, Associate Professor — B.S., M.S., State University of New York at Oswego; Ph.D., University of Cincinnati

Adjunct Faculty in Clinical Chemistry

Geisinger Medical Center, Div. of Laboratory, Danville, Pa.

John P. Anhalt, Ph.D., M.D., *Chairperson of Laboratory Medicine*

Paul Bourbeau, Ph.D., *Director of Microbiology*

Jay Burton Jones, Ph.D., *Director of Chemistry/Toxicology*

Mildred Louise Kaiser Fleetwood, Ph.D., *Director of Immunology*

Archimedes D. Garbes, M.D., *Associate Pathologist*

Stephen Meschter, M.D., *Associate Pathologist*

Alvin Swartzentruber, B.S., *Educational Coordinator, School of Medical Technology*

Aloysius J. Schulski, B.A., *Supervisor of Clinical Chemistry Laboratory*

Degree Programs

Bachelor of Science in Chemistry, Bachelor of Science in Clinical Chemistry

The Bachelor of Science program requires 57 semester hours for a major in chemistry.

The Bachelor of Science program requires 56 semester hours plus a clinical year (30 semester hours) for a major in clinical chemistry.

Goals and Objectives

The Bachelor of Science program in chemistry is designed to give students a strong background in chemistry with ample time available for taking courses in other disciplines. Often students in this program carry a double major, and many follow a pre-law or pre-med curricula. Students who intend to pursue advanced degrees in chemistry, biochemistry, or related disciplines or who anticipate a career in the chemical industry are encouraged to take the Bachelor of Science program that is approved by the Committee on Professional Training of the American Chemical Society. Advanced chemistry courses and an independent research project are required as part of this program.

The Bachelor of Science program in clinical chemistry is designed to prepare students for careers in a hospital setting or a pharmaceutical clinical laboratory.

The Bachelor of Science in Education program is designed for students who wish to enter the field of education and teach chemistry on the secondary school level. Degree requirements for the Bachelor of Science in Education are listed under *Secondary Education*.

Required Courses for Bachelor of Science in Chemistry

Required courses include: Chemistry 52.115, 52.131, 52.216, 52.232, 52.233, 52.321, 52.452, 52.361, 52.362, 52.322; Mathematics 53.125, 53.126, 53.225; Physics 54.211, 54.212; Computer Science 56.110 or 56.121 or 56.210.

Students who want American Chemical Society certification upon graduation must complete the following additional requirements: Chemistry 52.281, 52.492, 52.493 plus

a restricted elective selected from any 300 and 400 level course in chemistry (except Independent Study) or any approved 300 or 400 level course in mathematics or physics.

Required Courses for Bachelor of Science in Clinical Chemistry

Required courses include: Chemistry 52.115, 52.131, 52.216, 52.232, 52.233, 52.321, 52.341, 52.361; Biological and Allied Health Sciences 50.271, 50.343; Mathematics 53.125, 53.126, 53.225; Physics 54.211, 54.212; Computer Science 56.210; clinical year (30 semester hours) at Geisinger Medical Center in Danville, Pa.

Sequence of courses required to receive Honors in Chemistry includes: the regular American Chemical Society-approved Bachelor of Science sequence of courses including: 52.281, 52.492, 52.493, 52.494, and 09.495. An overall minimum QPA of 3.25 is necessary to be eligible to receive honors in chemistry.

Minor in Chemistry

The minor in chemistry consists of 19 to 21 semester hours. Required courses are 52.115, 52.131, 52.216 plus one of the following combinations of restricted electives: 52.232, 52.233, 52.321 or 52.232, 52.361 or 52.321, 52.361.

Certification of Program

The Department of Chemistry is recognized by the Committee on Professional Training of the American Chemical Society (ACS) as one which meets its nationally recognized standards for undergraduate education in chemistry. This recognition is significant for students considering professional employment in the chemical industry and/or those seeking admission to postgraduate education programs in the sciences and medicine.

Students meeting the requirements for the ACS-approved Bachelor of Science in Chemistry, with the department's assistance, are certified by the American Chemical Society and become eligible for membership in the society without the usual two-year waiting period.

Cooperative Program in Engineering

Students interested in chemical engineering can earn a bachelor's degree in chemistry and a Bachelor of Science in chemical engineering through a cooperative program with The Pennsylvania State University. Three years of study at Bloomsburg and two years at Penn State are required for this program. (See details listed under *Engineering and Liberal Arts*.)

Chemistry (Code 52)

52.100 Chemistry and the Citizen (3) — Discussion of chemical principles, the importance of chemistry, the use of chemicals and their impact on society and the environment. *Three hours of class per week.*

52.101 Introductory Chemistry (3) — Presents an introduction to chemistry for students with little or no background in chemistry. Surveys the principles of chemistry with emphasis on the fundamentals of chemical and physical measurements and calculations. *Three hours of class per week. Not intended as a beginning course for science majors.*

52.108 Physiological Chemistry (Spring) (4) — Surveys the essentials of organic and biochemistry. Includes bonding, structure, nomenclature, organic functional group reactions, and metabolism of biomolecules. *Three hours class, two hours of laboratory per week. Prerequisite: 52.101*

52.115 Fundamentals of Inorganic Chemistry (4) — Introduces descriptive inorganic chemistry and the chemical principles necessary to understand the descriptive material. First half of two-semester sequence for natural science or mathematics majors. Partially fulfills core requirement in inorganic chemistry for American Chemical Society. *Three hours of lecture/3 hours of laboratory per week. Prerequisite: High school chemistry or equivalent recommended*

52.131 Fundamentals of Organic Chemistry (4) — Emphasizes structure, stereochemistry, functional group organization, physical properties and classical reactivity of organic compounds. *Three hours of lecture and 3 hours of laboratory per week. Prerequisite: 52.115*

52.216 Chemical Principles and Measurements (4) — Second semester of introductory chemistry for natural science and mathematics majors. Surveys principles of chemical stoichiometry, intermolecular forces, kinetics, and thermodynamics as they apply to phase, electrochemical, and acid-base phenomena. Laboratory work illustrates chemical principles and emphasizes common chemical measurements. *Three hours of lecture and 3 hours of laboratory per week. Prerequisite: 52.115 plus high school Algebra II or equivalent*

52.232 Intermediate Organic Chemistry (4) — A continuation of organic topics, building on 52.131. Introduces spectroscopy and the application toward structure determination. Emphasizes reaction mechanisms, stereo-chemis-

try, syntheses, and analyses of representative compounds. *Three hours of lecture and 4 hours of laboratory per week.* Prerequisite: 52.131

52.233 Organic Spectroscopy (2) — Introduces spectroscopy to complement physical property characterization of organic compounds. Recommended for biology and allied health majors. Includes laboratory attainment of spectra and interpretation. *Two hours of lecture-problem solving per week.* Prerequisites: 52.131, 52.232 completed or concurrent

52.321 Analytical Chemistry I (3) — Introduces fundamental principles of chemical analysis utilizing classical wet chemistry and modern instrumental techniques. Stresses laboratory skills in the analysis of common commercial or environmental materials. *Two hours of lecture and 4 hours of laboratory per week.* Prerequisite: 52.216

52.322 Analytical Chemistry II (4) — Presents the theory and laboratory applications of common methods of instrumental analysis. Topics include spectrophotometry, chromatography, mass spectrometry, nuclear magnetic resonance, and electrochemistry. A laboratory centered course. *Three hours of lecture and 4 hours of laboratory per week.* Prerequisites: 52.321, 52.362 completed or concurrent

52.281 Introduction to Scientific Literature (Fall) (1) — Stresses the use of the library and scientific journals to facilitate the formulation of scientific research proposals and presentations. Experience gained in using the literature to design a senior research project and to make presentations to an audience of faculty and peers. *One hour class per week.* Prerequisite: Advanced standing as a natural science major

52.341 Biochemistry (4) — Emphasizes structure, reactivity, and metabolic reactions of the naturally occurring biomolecules. Discusses selected topics from the various metabolic pathways (both anabolic and catabolic). Introduces biochemical techniques encountered by the modern biochemist. *Three hours of lecture and 4 hours of laboratory per week.* Prerequisites: 52.131, 52.216

52.361 Physical Chemistry I (Fall) (4) — Studies thermodynamics; Gibbs free energy and equilibrium; kinetic theory of gases and solutions; chemical kinetics. *Three hours of lecture and 4 hours of laboratory per week.* Prerequisites: 52.115, 52.216; Mathematics 53.225; Physics

54.212

52.362 Physical Chemistry II (Spring) (4) — Continuation of 52.361; Schrödinger quantum mechanics, solid state, molecular orbital theory; spectroscopy. *Three hours of lecture and 4 hours of laboratory per week.* Prerequisite: 52.361

52.482 Advanced Topics in Chemistry (3) — Advanced course dealing with specialized topics of interest to students in ACS degree track. Subject matter varies. Course may be taken more than once provided subject matter is not repeated. Prerequisite: Consent of the instructor

52.452 Advanced Inorganic Chemistry (Spring) (4) — Theories and principles of inorganic chemistry; coordination chemistry, organometallic chemistry, systematic analysis of periodic relationships and properties of important elements. *Three hours of lecture and 4 hours of laboratory per week.* Prerequisites: 52.115; 52.362 concurrent

52.491 Independent Study I: Special Topics in Chemistry (1-3) — Entails a directed laboratory or library oriented investigation of one or more topics of mutual interest to student and instructor. (See Independent Study)

52.492 Independent Study II: Introduction to Research (1-3) — Requires a search of chemical literature and a written survey report of the search. A detailed plan of research (to be implemented in 52.493) is developed in a second written report. (See Independent Study) Prerequisite: Approval of Chemistry Department

52.493 Independent Study III: Chemical Research (3) — Investigations of selected chemical problems for advanced students. Approximately 120 hours per semester. (See Independent Study) Prerequisites: 52.492, approval of Chemistry Department

52.494 Honors Independent Study IV: Chemical Research (3) — The third semester of a laboratory investigation of selected problems under the supervision of a chemistry faculty member. Approximately 120 hours per semester. (See Independent Study the Arts and Sciences Honors Program) Prerequisite: Enrollment in the Honors Program

52.498 Internship in Chemistry (3-15) — A work-study program, this course is not applicable toward a major or minor in chemistry. Prerequisites: Approval of Chemistry Department; junior or senior standing.

Department of Computer and Information Systems

Faculty

James S. Dutt, Chairperson, Associate Professor — B.S., M.S., Ph.D., The Pennsylvania State University

Patricia M. Boyne, Assistant Professor — B.A., Ladycliff College; M.S., The Pennsylvania State University; CDP

Frank S. Davis Jr., Professor — B.S., M.Ed., Shippensburg University; Ph.D., University of Pittsburgh

Carl J. Chimi, Associate Professor — B.A., M.B.A., Ph.D., University of Massachusetts

Harold K. Frey, Associate Professor — B.S., Lock Haven University; M.A., Iowa State University; M.S., Elmira College

Gene M. Gordon, Associate Professor — B.A., Southampton College; M.A., Antioch University; Ed.D., University of Massachusetts

Charles J. Hoppel, Associate Professor — B.S., University of Scranton; M.E.E., Ph.D., Syracuse University

Degree Program

Bachelor of Science in Computer and Information Science

A total of 57 semester hours is required for a major in computer and information science.

Goals and Objectives

The Department of Computer and Information Systems in the College of Business offers two baccalaureate degree programs: Computer and Information Science (CIS) and Management Information Systems (MIS). While both programs involve learning how to develop information systems for the business environment, they differ significantly in emphasis. (For information on the Management Information Systems program, see the section on *Management Information Systems*.)

The CIS curriculum prepares students in the development, operation and maintenance of computer-based information systems for the business environment. The program's focus centers on commercial software and hardware with an emphasis on problem solving, system analysis and design, data management, data communications and software development within a commercial context.

CIS has a strong technical emphasis. While students are required to take courses in economics, accounting, and other areas of business, the majority of the required coursework is in computer and information science. Students work in a variety of environments including networked micro-computers and workstations, multiuser minicomputers, and mainframes. The program prepares business students for positions such as: application programmer, programmer-analyst, systems analyst, data base administrator, and information specialist.

Admission

Students enrolled in other colleges within Bloomsburg University who wish to transfer into the CIS curriculum must have completed a minimum of 15 semester hours.

Required Courses

The following courses are required: two courses from Mathematics 53.118, 53.123, 53.125, 53.126 (the combination of 53.123 and 53.125 does not satisfy this requirement), and either 53.141 or 53.241; Economics 40.211 and 40.212; Accounting 91.221 and 91.222; Computer and Information Systems 92.177, 92.252, 92.256, 92.350, 92.351, 92.352, 92.354 and 92.452.

Elective Courses

A total of 15 semester hours is required in restricted elective courses. These are drawn from computer and information system courses. An additional 12 semester hours must be selected from courses in accounting, business law, finance, management, and marketing.

Free Electives

Free elective courses account for the remaining 17 to 20 semester hours required for graduation. Students may elect to focus these credits on obtaining a minor in business.

General Education Courses

In addition to mathematics and economics, CIS majors are required to take English 20.101 and 20.201 as general education selections.

Internship

Students are strongly encouraged to take an internship (92.432), although it is not a degree requirement. The course is counted as a free elective and can be taken for a maximum of 6 semester hours.

Computer and Information Systems (Code 92)

92.150 Introduction to Computer and Information Science (3) — Introduces computer-based systems and their use in problem solving and information processing. Includes a study of hardware and software concepts, data management, data communications, and system development. Involves hands-on experience with word processing, spreadsheet and file management software using networked microcomputers.

92.177 Structured Programming Methodology (3) — Introduces structured problem solving and programming, encompassing data representation, data structures, and control structures. Develops skills and knowledge needed to solve business problems with a computer; investigates software/tools used with CIS curriculum. Examines data representation, data structures, control structures, structured programming, algorithm development and computer concepts. Involves programming exercises using a high-level language on a UNIX platform. *Prerequisite: 92.150 or Computer Science 56.110 or equivalent*

92.251 Mini/Micro Programming Systems (3) — Surveys minicomputer capabilities available to the small business. Focuses on business applications and system design considerations for micro-based systems. Students work with a variety of software systems including: operating systems, a database management system, network software, and other emerging tools using networked microcomputers. *Prerequisite: 92.150 or Computer Science 56.110 or equivalent*

92.252 Business Oriented Programming (3) — Detailed study of structured problem solving in a business environment. Explores logical and physical structures, data representation, modular design, structured programming, and documentation. Presents processing techniques for one and two-level tables, data validation, control break logic and sequential file processing. Students develop increasingly complex programs using COBOL in a UNIX envi-

ronment. *Prerequisite: 92.177 or Computer Science 56.121*

92.254 Management Information Systems (3) — A study of how computer-based information systems provide information for effective decision making. Includes: structured analysis, design techniques, database concepts, person-machine interaction, data retrieval, and telecommunications. Focuses on the use of information technology in the modern business. *Prerequisites: 92.150 or Computer Science 56.110 or equivalent*

92.256 Data and Information Structures (3) — Studies standard data and file structures and algorithms for creation and manipulation of these structures. Explores rationale for use of structures under varying circumstances from both a practical and theoretical perspective. Involves computer exercises implementing selected algorithms in a suitable high-level language on a UNIX platform. *Prerequisite: 92.177 and 92.252*

92.350 Analytic Computing Concepts (3) — Presents a detailed examination of the C programming language and programming techniques appropriate to the UNIX environment. Data representation, code generation, and programming considerations related to file maintenance with UNIX and C explored and developed through actual programming experiences. *Prerequisite: 92.256 or Computer Science 56.210*

92.351 Systems Analysis and Design (3) — Provides an opportunity to bring together experiences in CIS courses, other business courses, and life to create usable business information systems. Helps develop skills required for successful business system development. *Prerequisites: 92.256*

92.352 Advanced Programming (3) — Presents advanced concepts of programming in COBOL with major emphasis on indexed sequential files, interactive programming, subroutine linkage, random files, and SQL RDBMS programming concepts. *Prerequisites: 92.256*

92.354 Data Base Processing Systems (3) — Details and examines data base terminology, organization, and models. Analysis, design, and administration of a relational compatible data base explored through applicable programming experiences. *Prerequisite: 92.256 or Computer Science 56.355*

92.356 Operating Systems (3) — Presents an overview of operating systems including real

and virtual operating systems and communications software and techniques. Includes diagnostic facilities, utility routines, and system commands. Provides a detailed look at UNIX. *Prerequisite: 92.350*

92.358 Data Communication Systems (Spring) (3) — Data communications terminology, technology, and the functional characteristics of communications hardware and software detailed and explored. Emphasizes systems and programming considerations as related to a commercial environment. *Prerequisite: 92.256 or Computer Science 56.355*

92.432 Internship in Computer and Information Systems (-6) — An educational arrangement between the student and an approved industrial, business, or government agency that provides a supervised work experience in a professional area of computer and information science. The experience relates to the academic principles and theories upon which the Computer and Information Systems curriculum is based. *Prerequisites: Grade point average of 2.5 and 80 semester hours*

92.450 Expert Systems and Artificial Intelligence (Fall) (3) — A survey of basic concepts and techniques of expert systems and artificial intelligence applied to commercial information systems. Examines knowledge acquisition, representation, storage, and inferencing methods used in expert systems. Stresses applica-

tions and illustrations from the business environment. *Prerequisite: 92.256 or Computer Science 56.355*

92.452 Advanced Software Development (Fall) (3) — A formal approach to modern techniques of software design and development and provides for hands-on experience for students to apply the techniques. Students work in teams in the organization, management, and development of a large software project. Emphasizes the use of CASE tools. *Prerequisite: 92.351*

92.456 Managerial Computer Applications (3) — Provides practical experience in analysis of business problems. Features advanced techniques and concepts of systems analysis and design along with software engineering with major emphasis on management information systems and decision support systems. Uses team approach to analyze, design, and document realistic systems. Uses project management methods, project scheduling and control techniques, formal presentations, and group dynamics. *Prerequisite: 92.351*

92.498 Special Topics (3) — Examines current or advanced issues in the field of computer and information systems not normally examined in depth in other courses.

Department of Mathematics and Computer Science

Faculty

Charles M. Brennan, Chairperson, Professor — B.S.Ed., Bloomsburg State College; M.A., Montclair State College; Ph.D., The Pennsylvania State University

Harold J. Bailey, Professor — B.S., Albright College; M.Ed., Ph.D., The Pennsylvania State University

Stephen D. Beck, Professor — B.S., Tufts University; M.S., Iowa State University; Ph.D., Rensselaer Polytechnic Institute

Paul C. Cochrane, Professor — B.S., M.S., Ph.D., State University of New York

Helmut Doll, Assistant Professor — B.A., University of Stuttgart; M.S., Oregon State University; Ph.D., University of California

JoAnne S. Grawney, Professor — B.S., Westminster College; M.A., Temple University; Ph.D., University of Oklahoma

Paul G. Hartung, Professor — B.A., Montclair State College; M.A., University of Colorado; Ph.D., The Pennsylvania State University

E. Dennis Huthnance Jr., Associate Professor — B.S., M.S., Ph.D., Georgia Institute of Technology

Scott Inch, Assistant Professor — A.A., Williamsport Area Community College; B.S., Bloomsburg University; M.S., Ph.D., Virginia Tech

Curt Jones, Assistant Professor — B.S., Lock Haven; M.S., University of Iowa; Ph.D., The Pennsylvania State University

Zahira S. Kahn, Associate Professor — B.A., Punjab University; M.Sc., Islamabad University; B.S., Bloomsburg University; M.A., Temple University

Stephen Kokoska, Professor — B.A., Boston College; M.S., Ph.D., University of New Hampshire

Robert Montante, Assistant Professor — B.S., Massachusetts Institute of Technology; M.S., Ph.D., Indiana University

Reza Noubari, Professor — B.S., M.S., Tehran University, M.Sc., Ph.D., University of Manchester, England

Clinton J. Oxenrider, Associate Professor — B.S., Bloomsburg State College; M.A., The Pennsylvania State University; D.A., Idaho State University

Timothy Phillips, Assistant Professor — B.A., Kutztown University; M.S., Longwood College; Ph.D., The Pennsylvania State University

James C. Pomfret, Professor — B.S., Bates College; M.S., New Mexico State University; Ph.D., University of Oklahoma

Medhi Razzaghi, Professor — G.C.E., Lewes Technical College; B.S., Sussex University; Ph.D., University of London

John H. Riley, Jr. Professor — B.A., Lehigh University; M.S., Ph.D., The University of Connecticut

Yixun Shi, Assistant Professor — B.S., Anhui Normal University at Chuzhon, China; M.S., Shanghai Teachers University, China; Ph.D., University of Iowa

June L. Trudnak, Professor — B.S., Bloomsburg State College; M.S., Bucknell University; Ph.D., The Pennsylvania State University

Erik Wynters, Associate Professor — B.S., University of New Hampshire; M.S., Ph.D., Cornell University

Degree Program

Bachelor of Science in Computer and Information Science

A total of 54 semester hours is required for a major in computer science.

Goals and Objectives

The Computer and Information Science program of the Department of Mathematics and Computer Science gives students a thorough grounding in the design, production, and analysis of software. Both the practical and theoretical issues involved in software and its development are emphasized. Students also obtain a basic understanding of hardware and its principles, particularly as it influences software. Mathematics is an essential tool in the curriculum. Students work in a variety of computing environments, ranging from single-user personal computers to multiple-user minicomputers and mainframes. Graduates are prepared for either further study in computer science or employment in the software industry.

Required Courses

The following courses are required: Speech Communication 25.103; Mathematics 53.125, 53.126, 53.185, and 53.241; Computer Science 56.121, 56.122, 56.240, 56.330, 56.350, 56.355, 56.386; and Computer and Information Systems 92.350. Courses designated with a code number of 92 are offered through the College of Business. See *Computer and Information Science* on page 152 for these course descriptions.

Specialized Requirements

Select five courses totaling 15 semester hours from the following list: Mathematics 53.381 and 53.492; Computer Science 56.215, 56.320, 56.356, 56.361, 56.373, 56.374, 56.410, 56.471, 56.472, and 56.491; Computer and Information Systems 92.352, 92.354, 92.356, and 92.358.

Computer Science (Code 56)

56.110 Introduction to Computer Science (3)

—Presents an introduction to computers and data processing — what they are, how they function, how they are controlled, and how they are used in problem solving. Basic concepts include hardware, I/O systems, data communication and storage, flow charting, and programming in BASIC on a microcomputer. Hands on experience with word processing, spreadsheets, and data base software is required. *Not appropriate and credit for 56.110 will not be given to a student who has taken Computer and Information Systems 92.150.*

56.121 Computer Science I (3) — An introduction to computer science with an emphasis on programming. Involves the use of a high-level language and the development of good programming style and fundamental techniques. *Prerequisite: 56.110 or the equivalent*

56.122 Computer Science II (3) — The design and execution of applications software using the Pascal language; utilizes the principles of modularization, top-down design, and the fundamental algorithms of searching, sorting, stacks, queues, linked lists, trees, and recursion. *Prerequisite: 56.121*

56.116 Algorithmic Processes for Computers (3) — Emphasizes concepts of FORTRAN 77; input and output, program documentation and control, structured programming, extended modes of arithmetic, character strings, and program development and execution. *May not be used toward the Computer Science major. Prerequisite: Programming experience or consent of the instructor*

Prerequisite: Programming experience or consent of the instructor

56.215 Programming in LISP (Fall/odd-numbered years) (3) — Introduces the LISP programming language with an emphasis on those features of LISP (e.g. functional style, emphasis on recursion, the list as the principle data structure, interactive programming environment) that distinguish it from other languages. *Prerequisite: 56.122 or consent of the instructor*

56.240 Microcomputer Concepts (Fall) (3) — Advanced topics in programming with a microcomputer, introductory concepts of microcomputer architecture, operating systems, and machine and assembly language for microprocessors. *Prerequisite: 56.122*

56.305 Computer Applications in Secondary School Mathematics (Spring/odd-numbered years) (3) — Studies the theory, design, and usage of a computer as an instructional or training tool. Uses microcomputer to demonstrate and develop software applications. *Prerequisite: 56.121*

56.320 Introduction to Logic Programming (Spring/odd-numbered years) (3) — Use of logic for programming, logic interpreters, recursive programming, nondeterministic and nonprocedural programming. Program verification and correctness and applications included. *Prerequisites: 56.122 or Computer and Information Systems 92.256 and Mathematics 53.185 or consent of the instructor.*

56.330 Computer Organization (Spring) (3) — Design of combinational and sequential circuits. Coding, various instruction formats and representation of data. Memory, central processors, input-output devices. Introduction to computer architecture. Characteristics and features of some existing computer systems. *Prerequisites: 56.122, Mathematics 53.185*

56.350 Organization of Programming Languages (Fall) (3) — An introduction to the issues of programming languages: syntax, semantics, parsing, language specification, and analysis. Emphasis on the run-time behavior of programming language constructs. *Prerequisite: 56.240*

56.355 Analysis of Algorithms and Data Structures (Spring) (3) — A detailed analysis of algorithms and data structures. Examination of theoretical and experimental performance of algorithms and data structures. Particular attention to algorithms for searching and sorting and techniques for implementing and manipulating various data structures: stacks,

queues, trees, graphs, and files. *Prerequisite: 56.122*

56.356 Object Oriented Programming with Applications (*Fall/even-numbered years*) (3) — Introduces object oriented programming including the concepts of objects, windows environment, inheritance, encapsulation, polymorphism, and event driven programming. Participation in the development of a large scale application project is required. *Prerequisite: 56.122 or Computer and Information Systems 92.256*

56.361 Coding and Signal Processing (*Fall*) (3) — A mathematical approach to codes and ciphers. Includes security codes, error-correcting codes, coding for efficiency in computer storage. Signal processing, including the Fourier transform and digital filters. Individual projects required. *Prerequisites: 56.116 or 56.122, and Mathematics 53.126*

56.373 Numerical Methods in Computing (*Fall*) (3) — An analysis and application of various methods of numerically solving problems in the areas of nonlinear equations; systems of equations, interpolation, and polynomial approximation; numerical integration; approximation theory; and differential equations. Students use a computer to design and execute algorithms for specific numerical procedures. *Prerequisites: 56.121 or 56.116, Mathematics 53.126*

56.374 Introduction to Discrete Systems Simulation (*Spring/Odd-numbered years*) (3) — Studies the ways in which systems can be modeled for computer solution. Emphasizes stochastic behavior by discrete random processes and the simulation tools for their solution. Prerequisites: A calculus course, a statistics course, and a programming course

56.386 Concurrent Programming and Foundations of Operating Systems (*Spring*) (3) — Studies the foundation of modern operating systems and concurrent programming problems associated with these systems. Students write and test their solutions to problems. Covers problems and possible solutions encountered in the development of all modern systems. *Prerequisite: 56.122 or 92.256*

56.410 Computer Graphics (*Spring/even-numbered years*) (3) — Presents the basic principles for design, use, and understanding of graphics systems. Hardware and software components of graphics systems examined with a major emphasis on creating and manipulating graphics displays using a software graphics package; the package includes standard computer graphics algorithms. Two and three dimensional graphics, animation, color, hidden line, and hidden surface algorithms studied in depth. *Prerequisites: 56.122, Mathematics 53.225 or consent of the instructor*

56.471 Numerical Analysis (*Alternate years*) (3) — Provides a computer-oriented analysis of algorithms of numerical analysis. Topics include nonlinear equations, interpolation and approximation, differentiation and integration, matrices and differential equations. *Prerequisites: 56.373, Mathematics 53.322*

56.472 Matrix Computation (*Spring/Odd-numbered years*) (3) — Presents a computer-oriented analysis of matrices. Includes Gaussian reduction, LDU factorization, special reduction techniques for tridiagonal matrices, iterative methods, and a study of the matrix eigenvalue problem. *Prerequisites: 56.373, Mathematics 53.118 or 53.225, or consent of instructor*

56.491 Special Topics in Mathematics (3) — Presents an area of computer science which is not available as a regular course offering. *Prerequisite: Consent of the instructor*

56.497 Internship in Computer Science (2-12) — Provides computer science majors with an opportunity to acquire meaningful and professional on-site training and learning in computer science at an industrial, private or business workplace. Note: a student may, with departmental approval, apply a maximum of 3 credits of internship toward the fulfillment of the computer science major. Each 1 academic credit requires 40 hours of supervised work and the limit is 12 total credit hours for internships. *Prerequisites: students must establish adequate course preparation for the proposed internship. Internship applications must be submitted one month before the internship begins and must be approved by the department chairperson.*

Department of Developmental Instruction

Faculty

- Jesse A. Bryan, Chairperson, Professor — A.B., Johnson C. Smith University; M.Ed., Temple University; Ph.D., Toledo University
Harold C. Ackerman, Assistant Professor — B.S. Ed., Bloomsburg State College; M.A., University of Kansas
Virgie Bryan, Assistant Professor — B.S., Fayetteville State College; M.Ed., Bloomsburg State College
Wayne George, Assistant Professor — B.S., Bloomsburg State College; M.S., The Ohio State University; M.S., Lehigh University
James F. Mullen, Assistant Professor — B.S., The Pennsylvania State University; M.Ed., Bloomsburg State College
Carol J. Venuto, Assistant Professor — B.A., Houghton College; M.S., Syracuse University
Janice Walters, Instructor — B.A, M.A., Bloomsburg University
John Wardigo, Assistant Professor — B.S., Bloomsburg State College; M.Ed., Kutztown University
Irvin Wright, Assistant Professor — A.A., Dodge City Junior College; B.Ed., State University of New York at Buffalo; M.Ed., University of Toledo

Goals and Objectives

The Department of Developmental Instruction provides developmental, study skills courses and other supportive services that are intended to assist students in making the transition from high school to college. These courses and services help students to improve basic skills (reading, writing, mathematics). All students, regardless of their current academic program or prior academic performance, may enroll in any courses offered by the department.

The goals of developmental instruction are to assist in the successful performance of all students and their smooth integration into the higher education process. The philosophy of Developmental Instruction is based on the principles of prevention of problems and dedication to meeting individual needs. The department offers a full range of academic, advisory, and counseling services to students. Services also are open to non-program students

who wish to take advantage of developmental reading, writing, or mathematics courses/labs conducted by faculty members and student tutors. The department has also established an experimental course in English as a second language.

The Reading Lab, located in Room 310 of Bakeless Center, offers individualized instruction in understanding textbooks and learning strategies for most courses on campus. Group instruction also is provided for selected courses based on student enrollment in the program. Workshops on test-taking strategies and mini-courses on speed reading are scheduled periodically.

A developmental writing course is available to any university student as a primer to entering the required English courses. Students who do not need a full semester of instruction may establish an individualized instruction program through the Act 101/EOP Writing Center in Bakeless Center for the Humanities, Room 309.

The purpose of developmental mathematics is to improve mathematical skills necessary for the successful completion of college-level courses. The mathematics lab, located in 309 Bakeless Center for the Humanities, also offers workshops on topics such as Building Self-Confidence in Mathematics and tutorial assistance for math classes offered at the university, especially College Algebra and Math Thinking. Students may use a variety of instructional materials including individualized learning programs, supplementary texts, audio tapes, microcomputers, and computer software (for computational skills, geometry, and algebra). Based upon incoming academic credentials, students may be required to take diagnostic examinations for possible placement in developmental courses.

***Developmental Instruction* (Code 01)**

01.011 Reading I (Summer) (3) — Designed to improve a student's reading ability to a level where he/she can compete at the next level. Instruction given in a laboratory and lecture format. Weekly contacts provide individualized prescriptions. *Two semester hours toward full-load status; grade counted in QPA. Does not apply to*

ward graduation

01.025 Reading II (3) — Course presents major components of the reading process and emphasizes basic reading skills. *Three semester hours towards full-load status; grade counted in QPA. Does not apply toward graduation. A prerequisite for College Reading and Study Skills for students scoring below the established cutoffs on the Nelson Denny Reading Test*

01.041 Writing I (Summer) (3) — Fundamentals of standard written English for students who test extremely low on SAT-V and whose writing samples confirm need. Emphasis on language activities such as conferencing, revising and editing of papers and reading response journals to improve basic skills in context and reduce anxiety about writing. Numerous and varied short writing assignments. *Grade counted in the QPA. Does not apply toward graduation*

01.060 Writing II (3) — Required of students whose SAT-V scores fall below a standard set by the university and whose writing samples confirm need. Students refine basic writing skills in context of varied writing assignments that address given rhetorical situations. Assignments call for specific evidence and responsible generalization from that evidence. Class-work may include conferencing, collaborative work, student presentations, reading and discussion as well as writing. *Grade counted in QPA. Does not apply toward graduation*

01.071 Pre Algebra (Summer) (3) — Geared for students with inadequate arithmetic skills. Study skill techniques and problem-solving strategies explored. Emphasizes basic computer literacy and uses computer-assisted instruction. *Three semester hours toward full-load status; grade counted in QPA. Does not apply toward graduation*

01.080 Introductory Algebra (3) — Recommended for students with minimal algebraic skills as evidenced by student preparation and results obtained in diagnostic tests. A program designed for each student may include operations of rational numbers, ratio, proportion, percent, geometric concepts, basic algebraic concepts and skills. Concepts may include beginning linear equations. *Three semester hours toward full-load status; grade counted in QPA. Does not apply toward graduation*

01.090 Intermediate Algebra (3) — Emphasizes intermediate algebraic skills necessary if

success is to be obtained in College Algebra. Topics include linear equations and functions, exponents and polynomials, factoring, rational expressions, and quadratic equations. Provides concepts and skills necessary for college-level math courses that build on a limited algebraic background. *Three semester hours toward full-load status; grade counted in QPA. Does not apply toward graduation*

01.095 Introductory Science (Summer) (3) — Acquaints the student with scientific terminology and methodology; familiarizes the student with the study skills unique to the mastery of science; prepares the student for subsequent courses in science; and makes the student more comfortable with the nature and characteristics of science. *Three semester hours toward full-load status; grade counted in QPA. Does not apply toward graduation*

01.009 Intensive English Seminar (Summer) (6) — Designed for entering international students who score at least at the ACTFL level 1+ on a departmentally-administered oral placement test, but who have low TOEFL scores or who wish to improve English skills preparatory to enrollment in other classes. Provides 90 hours of conversation and acculturation in the company of native English speakers, together with some practice, writing and grammar. *Credit does not apply toward graduation*

01.100 College Study Skills (1) — Designed to provide, formulate, and apply the methods and models of learning strategies. Principle focus on content area reading and study skills. Outside readings and discussion focus on the nature of learning and the individual's responsibility to learning. Product and process discussed and compared to various approaches to learning. *Applies toward graduation. Usually restricted to the summer freshmen program or offered upon special request*

01.120 College Reading and Study Skills (3) — Develops the complex reading and study skills essential for college learning. Focuses on content area reading and study strategies, reading flexibility, and critical reading skills. Outside readings focus on the nature of learning and the individual's responsibility to learning. Students may be required to use the reading lab for computerized vocabulary lessons and speed reading exercises. *Student may not take both College Study Skills and College Reading and Study Skills. Applies toward graduation*

Department of Geography and Earth Science

Faculty Credentials

- James R. Lauffer, Chairperson, Professor — B.S., Allegheny College; M.S., University of Hawaii; Ph.D., University of Delaware
- Duane D. Braun, Professor — B.S., New York at Fredonia; M.A., Ph.D., The Johns Hopkins University
- Norman M. Gillmeister, Professor — B.A., Harvard College; M.A., Indiana University; M.A., Ph.D., Harvard University
- Joseph R. Pifer, Associate Professor — B.S., Clarion State College; M.A., Arizona State University
- Michael K. Shepard, Assistant Professor — B.S., Vanderbilt University; Ph.D., Washington University
- Dale A. Springer, Associate Professor — A.B., Lafayette College; M.S., University of Rochester; Ph.D., Virginia Polytechnic Institute and State University
- Lawrence Tanner, Assistant Professor — B.A., Williams College; M.S., University of Tulsa; Ph.D., University of Massachusetts

Degree Programs

Bachelor of Science in Earth Science, Bachelor of Science in Geology

A total of 56 semester hours is required for a major in earth science, 68 semester hours is required for a major in geology, and a total of 20 semester hours is required for a minor in geology.

Goals and Objectives

The primary goal of the faculty of the geology-earth science program is to provide students with a solid foundation in geology and/or the earth sciences. This is accomplished by balancing classroom studies, laboratory exercises, and field experience with ancillary courses in chemistry, physics, and mathematics. The departmental program also supports the university's aim of providing a strong liberal arts background for our students. This integration of science and liberal arts successfully prepares graduates for entry-level employment in the earth science profession or for acceptance into highly competitive graduate programs in the geological sciences.

Bachelor of Science in Earth Science

The degree program in earth science requires the following courses: Earth Science 51.101, 51.102, 51.111, 51.112, 51.255, and 51.259, plus four courses elected from 51.261, 51.262, 51.320, 51.355, 51.360, 51.365, 51.369, 51.370, 51.468, 51.470, and 51.475, 51.493 and 51.496, and approved courses offered by the Marine Science Consortium; Computer Science 56.110 or Computer and Information Systems 92.150 or a higher level course in programming, plus two courses selected from Mathematics 53.113, 53.123, 53.124, 53.125, 53.126, and 53.141; Chemistry 52.115, 52.216 or 52.131; Physics 54.110, 54.111, and 54.112.

A maximum of 9 semester hours from the Marine Science Consortium may be applied toward this bachelor's degree. A listing of acceptable marine science course numbers follows the Code 55 course descriptions. See the section of the catalog on biology.

Bachelor of Science in Geology

The degree program in geology requires the following courses: Earth Science 51.101, 51.102, 51.111, 51.112, 51.261, 51.262, 51.360, 51.365, 51.369, 51.468, 51.493, and 51.451 or equivalent 4 to 6 semester hours field course; Computer Science 56.110 or Computer and Information Systems 92.150 or a higher level course in programming; Mathematics 53.123 and 53.124 and 53.141 or 53.125 and 53.126; Chemistry 52.115 and 52.216 or 52.131; Physics 54.111 and 54.112 or 54.211 and 54.212.

A minor program in geology requires the following: 51.101, 51.102, 51.111, 51.112 plus 12 hours selected from 51.261, 51.262, 51.320, 51.355, 51.360, 51.365, 51.369, 51.370, 51.468, 51.470 and 51.475.

Earth Science and Geology (Code 51)

51.101 Physical Geology (3) — Studies the landscape in relation to the structure of the earth's crust; agents at work to change landforms; classification and interpretation of rocks. *One semester hour optional lab; an afternoon*

field trip is required

51.102 Historical Geology (3) — Examines the evolution of earth and life on earth as interpreted from rock and fossil evidence; particular emphasis is on the geologic history of North America. *One semester hour optional lab; afternoon field trip is required*

51.105 Environmental Geology (3) — Application of geologic knowledge to environmental concerns. Emphasizes energy, soil, mineral, and water resources along with Earth processes that are hazardous to humans. *An afternoon field trip with a nominal fee is required*

51.111 Physical Geology Laboratory (1) — Presents an introduction to the practice of fundamental geology laboratory techniques including qualitative and quantitative analysis. *Two hours of laboratory per week. It is recommended that course be taken concurrently with 51.101*

51.112 Historical Geology Laboratory (1) — Provides an interpretation of Earth's history through the identification and evolution of the rock and fossil record and through the interpretation of geologic maps. *Two laboratory hours per week. It is recommended that course be taken concurrently with 51.102*

51.255 Meteorology (3) — Studies the atmosphere via the use of gas laws and the underlying principles of atmospheric change. *The field trip component incurs an additional cost to students of approximately \$20 for airfare*

51.259 Oceanography (3) — Provides an introduction to the geologic, chemical, and physical aspects of the ocean basins. Emphasizes wave motion, topographic features, ocean basin structure, current circulation, and methods of investigation. *A weekend field trip is encouraged*

51.261 Mineralogy (Fall) (4) — Reviews the origin, occurrence, and identifying characteristics of common minerals. Stresses megascopic and microscopic techniques. *Three hours of class, 2 hours of laboratory per week. Prerequisite: 51.101 and 51.111 or permission of the instructor*

51.262 Petrology (Spring) (4) — Presents megascopic and petrographic analysis and identification of rocks with emphasis on field occurrences and associations. *Three hours of class, 2 hours of laboratory per week. Prerequisite: 51.261*

51.320 Remote Sensing of the Earth (3) — Studies the use of remote sensing technology to explore for, monitor, and manage Earth's

natural resources. *Two hours of class, 2 hours of laboratory per week. Prerequisite: 53.112 or higher or consent of the instructor*

51.355 Synoptic Meteorology (3) — Presents observation and analysis of data for understanding and predicting the complexities of the atmosphere. *Prerequisite: 51.255 or consent of instructor*

51.360 Introduction to Paleontology (4) — Introduces students to modern concepts and methods in paleobiology using examples from various groups of organisms important in the fossil record. *Field trips and laboratory work are an integral part of this course. Prerequisite: 51.102, 51.112 or Biology 50.211 or consent of the instructor*

51.365 Geomorphology (Fall) (4) — Study of the origin of landforms with emphasis on the geologic processes and structures that generate the landforms and applications of landform analysis. *Two-day weekend field trip is required. Three hours of class, 2 hours of laboratory per week. Prerequisite: 51.101 and 51.111 or consent of instructor*

51.369 Structural Geology (Spring) (4) — Analyzes rock deformation based upon the principles of rock mechanics and the utilization of data from field investigations. *Three hours of class, 2 hours of laboratory per week. Prerequisites: 51.101 and 51.111 or permission of the instructor*

51.370 Hydrology (Fall) (3) — Study of water movement upon and within the Earth with emphasis on calculations used in flood forecasting, surface water supply, and groundwater supply. *Two hours of class, 2 hours of laboratory per week. Prerequisite: 51.101 or 51.105*

51.451 Field Techniques in Earth Science (Summer) (6) — Provides intensive field and laboratory training in the use of equipment and techniques in geology, hydrology, and cartography. *Field trips are integral, vital parts of the course. Prerequisite: 15 semester hours in earth science courses or consent of the instructor*

51.468 Stratigraphy and Sedimentation (Fall) (4) — Studies processes and agents which erode, transport, and deposit sediments and the geologic interpretation of the resulting rocks. *Three hours of class, 2 hours of laboratory per week. Prerequisite: 51.101, 51.111, 51.102, 51.112 or permission of the instructor*

51.470 Groundwater Hydrology (Spring) (3) — Covers well hydraulics exploration techniques, groundwater flow theory, development

of groundwater supplies, and prevention or correction of groundwater pollution. A one- or two-day field trip required. *Two hours of class, 2 hours of laboratory per week.* Prerequisites: 51.101, 51.111 and 51.365

51.475 Independent Study in Earth Science (1-3) — Provides an opportunity for student research in various areas of earth science. Research is conducted under the supervision of a faculty member. *See subsection of the catalog on Independent Study.* Prerequisite: 21 semester hours in earth science

51.493 Bibliography and Research (3) — Provides for library and/or field research in geology. Prerequisites: 51.261, 51.262, 51.468 or consent of the instructor

51.496 Internship in Earth Science (3-15) — Provides for a work-study program available only to juniors and seniors majoring in earth science. *Not applicable toward a major or a minor in earth science*

Marine Science Consortium

Courses in marine science are offered during the summer by the Marine Science Consortium. The consortium is a joint program sponsored by several Pennsylvania state universities. The following are acceptable as elective courses for majors in earth science.

Marine Science (Code 55)

(Offered at Wallops Island, Va.)

- | | |
|---------------|---|
| 55.110 | Introduction to Oceanography |
| 55.211 | Field Methods |
| 55.212 | Navigation |
| 55.331 | Chemical Oceanography |
| 55.364 | Marine Geology |
| 55.420 | Marine Micropaleontology |
| 55.458 | Exploration Methods in Marine Geology |
| 55.459 | Coastal Geomorphology |
| 55.498/55.598 | T pics in Marine Science |
| 55.500 | Problems in Marine Science |
| 55.530 | Coastal Sedimentation |
| 55.570 | Research Cruise-Biology, Geology, Pollution |

Department of Economics

Faculty Credentials

Woo Bong Lee, Chairperson, Professor — B.S., Delaware Valley College; M.S., Ph.D., Rutgers University

Sukhwinder Bagi, Assistant Professor — B.A., M.Ed., M.A., Punjab University; Ph.D., Vanderbilt University

Ujagar S. Bawa, Professor — B.A., M.A., Punjab University; A.M., University of Pennsylvania; Ph.D., Cornell University

Peter H. Bohling, Professor — B.A., Miami University; M.A., The University of Iowa; Ph.D., University of Massachusetts

Mehdi Haririan, Professor — B.A., National University; M.A., Iowa State University; Ph.D., New School for Social Research

Saleem M. Khan, Professor — B.A., S.E., College, Bahawalpur; M.A., Government College, Lahore, Punjab University; Ph.D., J. Gutenberg University

Rajesh K. Mohindru, Professor — B.A., M.A., DAV College; M.A., Ph.D., University of Pennsylvania

Robert S. Obutelewicz, Assistant Professor — B.A., B.S., Carson-Newman College; M.A., Ph.D., University of Massachusetts

Elizabeth P. Patch, Assistant Professor — B.S., M.S., Ph.D., Lehigh University

Robert P. Ross, Associate Professor — B.A., M.A., Washington University

Degree Programs

Bachelor of Arts in Economics, Bachelor of Science in Business Economics, Bachelor of Arts in Political Economics

A total of 45 semester hours is required for a major in economics.

A total of 48 semester hours is required for a major in business economics.

A total of 45 semester hours is required for a major in political economics.

Goals and Objectives

The Department of Economics at Bloomsburg University offers a systematic study of the economic activities of government, business, and consumers. The core of the curriculum enables the student to master basic principles of economics, to develop analytical skills, and to interpret economic phenomena.

To accommodate the diversity of interests

at the undergraduate level, the department has three tracks open to economic majors, two lead to a Bachelor of Arts and one to a Bachelor of Science. The three tracks are: a general study of economics in preparation for graduate school or a career in the public or private sector; business economics, the student is interested in analytical economics and intends to pursue graduate work or career in business or government; and political economics, if the prospect of a career dealing with political and inter-national problems in the public arena is appealing or the student intends to pursue advanced study in the field.

Required Courses

The following five courses are required: Economics 40.211, 40.212, 40.311, 40.312, 40.346; plus a track in either economics, business economics, or political economics.

Required Elective Courses

Electives in economics, business, and political science in any of the options require the adviser's approval.

General Economics

Select one course from Economics 40.246 or Mathematics 53.125; and 27 semester hours in elective courses in economics, including Economics 40.400 or 40.446.

Business Economics

This track includes the following courses: Business 91.221 and 91.222 or 91.220 and 91.223, Business 93.345, 96.313, 97.310; Computer Science 56.110 or equivalent; 15 semester hours in elective courses in economics, including Economics 40.446.

Political Economics

Courses in the political economics track include: Political Science 44.120, 44.336; Economics 40.315, 40.422, 40.460, 6 semester hours of elective courses in economics; 9 semester hours of elective courses in political science.

Minor in Economics

The minor provides a basic competence in economics for non-economics majors and constitutes 18 semester hours. Courses required

for a minor in economics include: Economics 40.211, 40.212, 40.311, and 40.312; 6 semester hours of elective courses in economics chosen from General Economics Theory (Economics 40.313, 40.315, 40.316, 40.410, 40.413, 40.415 and 40.433), Statistical Analysis (Economics 40.346, 40.400, and 40.446), and Economic History and Systems (Economics 40.422, 40.423, 40.424, 40.434, and 40.460).

Economics (Code 40)

40.211 Principles of Economics I (3) — Studies macroeconomics: nature of the economic problem; economic concepts; institutional framework; supply, demand, and the price system; national income accounting; determination of output and employment levels; consumption, saving, and investment behavior; inflation and unemployment; business cycles; monetary and fiscal institutions and theory; economic growth.

40.212 Principles of Economics II (3) — Studies microeconomics: supply, demand, the price system; cost and production analysis, theory of consumer behavior and the firm; output and price determination, resource allocation, and determination of factor incomes under perfect and imperfect markets; current economic problems, and international economics. *Prerequisite:* 40.211

40.246 Business and Economic Mathematics (3) — Presents an introduction to basic mathematical tools most frequently employed in economics and business, e.g., systems of linear equations, inequalities, elements of linear programming, matrix algebra, logarithms, mathematics of finance, and differential and integral calculus.

40.311 Intermediate Micro-Theory and Managerial Economics (3) — Reviews the theory of consumer behavior and the firm; output and price determination under different market systems; pure competition, pure monopoly, oligopoly and monopolistic competition; production and cost analysis; allocation of resource and distribution of income; comparison of behaviors of competitive, monopolistic, and oligopolistic product and resource markets; constrained and nonconstrained optimization techniques and their applications to business decisions and business practices; welfare economics. *Prerequisites:* 40.211, 40.212, 40.246

40.312 Intermediate Macroeconomic Theory (3) — Stresses the national income analysis;

theory of income determination, employment, and price levels; monetary and fiscal institutions; theory and policy; investment, interest, and demand for money; business cycles; inflation and unemployment; national debt; macroeconomic equilibrium; prices, wages, and aggregate supply, economic growth, foreign trade and balance of payments; economic policy. *Prerequisites:* 40.211, 40.212, 40.246

40.313 Labor Economics (3) — Presents the economics of the labor market, the supply of and demand for labor, the nature of theory and wages, productivity and inflation, unionism, theories of the labor movement, collective bargaining and public policy. A major focus is the relationship between labor markets and gender and racial issues. For each of the economic issues, the implications with respect to gender and race will be examined. The economic analysis and empirical data presented in the course will emphasize differences by race and gender. *Prerequisite:* 40.212.

40.315 Business and Government (3) — Surveys government policies for maintaining competition, for substitution regulation in place of competition and for substituting public for private enterprise; tests of various government policies in light of economic theory and historical experience. *Prerequisite:* 40.212

40.316 Urban Economics (3) — Applies economic theory and recent empirical findings to urban resource use. Analyzes problems of unemployment, housing, education, transportation, pollution, and equal opportunity. *Prerequisite:* 40.212

40.317 Population and Resource Problems (3) — Reviews classical theories of population growth; recent economic models of population correlating natural resources; capital accumulation and technological change; and population problems in North America, European, and developing countries. Analyzes recent trends in birth and death rates as factors in population growth. Studies measures of population and labor force, their distribution by age, sex, occupation, regions; techniques for projecting population levels. Course is not offered on a regular basis. *Prerequisite:* 40.212

40.346 Business and Economics Statistics I (3) — Organizing and presenting data, descriptive statistics, elements of probability and probability distributions, sampling and sampling distributions, estimation and hypothesis testing, analysis of variance and Chi-square, introduction to regression and correlation as applied to business and economic problems. *Prerequisite:*

site: 40.212

40.400 Introduction to Econometrics (3) — Applies modern statistical methods to economic problems; time series and cross-sectional analysis of measurements of demand and costs; macroeconomics models; income distribution and growth model. *Prerequisites:* 40.212, 40.346

40.410 Public Finance (3) — Analyzes revenues and expenditures of local, state, and national government in light of micro and macrotheory; criteria and models of government services; subsidies, etc., the principles of taxation, public borrowing, and public debt management; impact of fiscal and budgetary policy on resource and income allocation, internal price and employment stability; the rate of growth and world economy. *Prerequisite:* 40.212

40.413 Money and Banking (3) — Reviews the historical background and the development of monetary practices and principles of banking; special attention given to commercial banking and credit regulations and current monetary and banking development. *Prerequisite:* 40.212

40.415 Environmental Economics (3) — A study of the economics of environmental quality. Examines environmental facts and social circumstances with particular emphasis on market and non-market solutions to the environmental problems. Topics include the private market and its efficiency, externalities, environmental quality as a public good, income distribution effects of government environmental quality as a public good, income distribution effects of government environmental programs; water resources and water quality, problem of air quality, and quality of life and other environmental problems; prohibitions on and regulation of polluting activities, taxes, subsidies, and effluent charges; population, economic growth, and environmental quality. *Prerequisite:* 40.212

40.422 Contrasting Economics (3) — Outlines theories of capitalism and socialism with a special emphasis on Marxian theory. Compares theoretical and actual performance of capitalism, socialism, and communism. *Prerequisite:* 40.212

40.423 History of Economic Thought (3) — Surveys economic theories propounded in the past and their effect on present-day thinking about economic, business, and political systems. The surplus value theory; economic planning as part of government responsibility; relation of family budgets to Engel's Law; government responsibility for employment and

rent control. *Prerequisite:* 40.212

40.424 Economic History of the Western World (3) — Presents a comparative analysis of the economic theory of the United States and Europe with particular attention to the interplay of changes in business, financial, and labor institutions, products and production, adaptations to resource differences, and conflicting economic doctrines. *Prerequisite:* 40.212

40.433 International Economics (3) — Addresses the pure theory of international trade. Outlines the gains from trade; free trade and protection; balance of payments; foreign exchange and capital movements; the dollar and the international monetary system and international liquidity shortage. *Prerequisite:* 40.212

40.434 Economic Growth of Underdeveloped Areas (3) — Presents studies of stagnating economies; theories of underdevelopment; operative resistances to economic growth; the role of capital, labor, population growth, and technological advance; development planning and trade in development settings. *Prerequisite:* 40.212

40.446 Business and Economic Statistics II (3) — Probability distributions; regression and correlation analysis; analysis of variance and designs of experiments; time series analysis and index numbers, non-parametric methods; modern decision theory and Bayesian statistics; computer application. *Prerequisites:* 40.212, 40.346

40.460 Advanced Political Economy (3) — Applies economic and political models of social decision making to historical problems from local through international levels. Presents an evaluation of market; political and mixed techniques in particular areas from the 18th through the 20th centuries. *Prerequisite:* 40.212

40.470 Senior Seminar (3) — Discusses the current literature on economic theory and economic policy. Students read one journal article a week on which they write a report and make a seminar presentation. *Prerequisite:* Senior standing or consent of the instructor

40.490 Independent Study in Economics (1-3) — Provides students with an opportunity to receive individualized instruction as they pursue indepth inquiries into previously specified subject matter of special interest within the field of economics. *Topic and outline must be developed with a faculty sponsor and approved by the department during the preceding semester of residence. See section on Independent Study.*

Department of Curriculum and Foundations

Faculty

- William S. O'Bruba, Chairperson, Professor — B.S., California State College; M.Ed., Duquesne University; Ed.D., Indiana University of Pennsylvania
- Donald L. Pratt, Assistant Chairperson, Associate Professor — B.S., Utica College of Syracuse University; M.Ed., St. Lawrence University; Ph.D., University of South Florida
- C. Meade Beers, Assistant Professor — B.A., M.Ed., Ph.D., University of Pittsburgh
- Neil L. Brown, Assistant Professor — B.S., Kutztown State College; M.Ed., Lehigh University; Ed.D., Temple University
- Chris A. Cherrington, Associate Professor — B.S., University of Oklahoma; M.Ed., Ph.D., University of Virginia
- Robert L. Clarke, Assistant Professor — B.A., King's College; M.A., Seton Hall University; Ed.D., University of Pennsylvania
- Henry D. Dobson, Associate Professor — B.S., Bloomsburg University; M.S., Syracuse University; Ph.D., The Pennsylvania State University
- Gary J. Doby, Associate Professor — B.S., M.S., Ph.D., State University of New York College at Buffalo
- M. Hussein Fereshteh, Assistant Professor — B.A., Teacher University of Tehran; M.P.A., University of Hartford; Ph.D., The University of Connecticut
- Bonita B. Franks, Associate Professor — B.S., M.S., Central Connecticut State University; Ph.D., The Pennsylvania State University
- Robert E. Gates, Assistant Professor — B.S. University of Maine at Farmington; M.Ed., Ed.D., University of Louisville
- Nancy G. Gilgannon, Professor — B.S., Bloomsburg State College; M.S., Marywood College; D.Ed., The Pennsylvania State University
- Mary G. Harris, Associate Professor — B.A., Macalester College; M.A., California Lutheran College; Ed.D., University of Southern California
- John R. Hranitz, Professor — B.S., M.Ed., Ed.D., Indiana University of Pennsylvania
- Jane McPherson, Assistant Professor — B.A., Western Washington State College; M.Ed., Western Washington University; M.S., Ph.D., University of Oregon
- Gorman L. Miller, Professor — B.A., LaVerne College; M.S., Indiana University; Ed.D., Ball State University
- Frank Misiti, Associate Professor — B.S., Mansfield State College; M.Ed., Ph.D., The Pennsylvania State University
- Gilda M. Oran, Assistant Professor — B.A., University of Toronto; M.Ed., Ed.D., University of Miami
- Egerton O. Osunde, Assistant Professor — B.S., Ahmadu Bello University; M.A., Case Western Reserve University; M.A., Ph.D., The Ohio State University
- Edward J. Poostay, Professor — B.S., Temple University; M.Ed., The Pennsylvania State University; Ph.D., University of Georgia
- Rosemary T. Radzievich, Assistant Professor — B.A., The Pennsylvania State University; M.Ed., Bloomsburg University; Ed.D., Lehigh University
- Shelly C. Randall, Assistant Professor — B.S., University of Michigan; M.A., Wayne State University; Ph.D., University of Pennsylvania
- Lorraine A. Shanoski, Professor — B.S., M.Ed., Northeastern University; Ed.D., Indiana University of Pennsylvania
- Viola C. Supon, Assistant Professor — B.S., Bloomsburg State Teachers College; M.A., Trenton State University; Ed.D., Temple University
- David E. Washburn, Professor — B.A., M.Ed., Ph.D., University of Arizona; Postdoctoral Certificate in Multicultural Education, University of Miami
- Mary Alice Wheeler, Assistant Professor — B.A., University of Denver; M.S., Georgetown University; Ph.D., University of Pennsylvania
- Bonnie L. Williams, Associate Professor — B.S., M.Ed., Bloomsburg University; Ed.D., Temple University
- Patricia K. Wolf, Assistant Professor — B.A., Morehead University; M.A., Duquesne University; Ph.D., University of Pittsburgh

Degree Programs

Bachelor of Science in Education—Early Childhood Education, Bachelor of Science in Education—Elementary Education, Bachelor of Science in Education—Secondary Education

A major in early childhood education (N-K-3) requires a minimum of 128 semester hours.

A major in elementary education (K-6) requires a minimum of 128 semester hours.

A major in secondary education (7-12) may require from 128 to 134 semester hours.

Goals and Objectives

Four curricula in education are offered through the School of Education's Department of Curriculum and Foundations in the College of Professional Studies: one leading to certification for kindergarten through grade 6 (K-6); one in early childhood education which leads to certification for nursery, daycare, preschool, kindergarten, and grades 1-3 (N-K-3); a dual certification program that combines the K-6 and the N-K-3 programs; and a curriculum in secondary education.

Secondary Education is a major planned to offer academic, cultural, and professional experience significant to the personal and professional competence of a beginning teacher of a specialized subject area in the secondary schools. The curriculum requirements comprise general education, professional education, and a subject area concentration.

Early Childhood Education (N-K-3)

Recommended General Education Courses

A total of 54 semester hours in General Education Courses is prescribed for the early childhood education major inclusive of 6 semester hours in mathematics, 3 semester hours in biology, 3 semester hours in physical science, and 12 semester hours in social science elected from three of the groupings listed in the section on General Education requirements. This should include at least 6 semester hours in composition and 3 semester hours in literature.

Academic Background Courses

Academic background courses include: 6 semester hours in mathematics; 3 semester hours in biology; 3 semester hours in physical

science; 12 semester hours in social sciences elected from three of the groupings listed in the section on General Education Requirements, including at least 6 semester hours in composition and 3 semester hours in literature.

Required Courses

The following courses in Educational Foundations (Code 60), Early Childhood and Elementary Education (Code 62), and Special Education (Code 70) develop knowledge of the nature of the child, the nature of the school, the learning process, general methods of teaching, and methods of teaching particular subjects, and to provide student teaching experience. A total of 65 semester hours is taken in required courses. None may be taken on a pass/fail basis.

- 60.201 Field Studies in Education I
- 60.204 Educational Computing and Technology
- 60.251 Psychological Foundations of Education
- 60.291 Principles of Teaching
- 60.301 Field Studies in Education II
- 60.311 Educational Measurements and Evaluation
- 60.375 Teaching the Reluctant Reader
- 60.393 Social Foundations of Education or 60.394 Education in an Urban Society
- 60.497 Teaching in Education: First Experience
- 60.498 Teaching in Education: Second Experience
- 62.121 Introduction to Early Childhood Education
- 62.302 Teaching Science in the Elementary School
- 62.310 Teaching Fine Arts in the Elementary School
- 62.322 Seminar in Learning Experiences with Young Children
- 62.371 Teaching Reading in the Elementary School
- 62.373 Diagnostic and Remedial Reading
- 62.390 Teaching Social Studies in the Elementary School
- 62.391 Teaching Language Arts in the Elementary School
- 62.398 Teaching Mathematics in the Elementary School
- 62.410 Methods and Materials in Early Childhood Education I

- 62.420 Methods and Materials in Early Childhood Education II
 70.101 Introduction to Exceptional Individuals

Elective Courses

A minimum of 9 semester hours is taken in elective courses. None of these courses may be taken on a pass/fail basis.

- 05.311 Methods and Materials in Elementary School Physical Education
 05.320 Health and Safety in the Elementary School
 20.384 Literature for Children
 30.205 Children's Art
 60.302 Research Literacy
 60.427 Classroom Management and Effective Discipline
 62.304 Environmental Education in the Elementary School
 62.376 Language Experiences for Children
 62.389 Individualized Instruction Activities in the Elementary School
 62.450 Methods of Teaching Foreign Languages in the Elementary School
 79.312 Internship in Education (1 to 3 semester hours only in this area)

An area of concentration is optional.

No free electives are available for this program.

Elementary Education (K-6)

Recommended General Education Courses

A total of 54 semester hours in General Education courses is prescribed for the elementary education major inclusive of 6 semester hours in mathematics, 3 semester hours in biology, 3 semester hours in physical science, and 12 semester hours in social science elected from three of the groupings listed in the section on General Education Requirements. This should include at least 6 semester hours in composition and 3 semester hours in literature.

Required Courses

These courses are intended to develop knowledge of the nature of the child, the nature of the school, the learning process, general methods of teaching, and methods of teaching particular subjects, and to provide student teaching experience. A total of 53 semester hours is taken in required courses. None may be taken on a pass/fail basis.

- 60.201 Field Studies in Education I

- 60.204 Educational Computing and Technology
 60.251 Psychological Foundations of Education
 60.291 Principles of Teaching
 60.301 Field Studies in Education II
 60.311 Educational Measurements and Evaluation
 60.375 Teaching the Reluctant Reader
 60.393 Social Foundations of Education or
 60.394 Education in an Urban Society
 60.497 Teaching in Education: First Experience
 60.498 Teaching in Education: Second Experience
 62.302 Teaching Science in the Elementary School
 62.310 Teaching Fine Arts in the Elementary School
 or 35.311 Music in the Elementary School
 62.371 Teaching Reading in the Elementary School
 62.373 Diagnostic and Remedial Reading
 62.390 Teaching Social Studies in the Elementary School
 62.391 Teaching Language Arts in the Elementary School
 62.398 Teaching Mathematics in the Elementary School

Elective Courses

No elective courses may be taken on a pass/fail basis. Students select a minimum of 9 semester hours from the following courses:

- 05.311 Methods and Materials in Elementary School Physical Education
 05.320 Health and Safety in the Elementary School
 20.384 Literature for Children
 30.205 Children's Art
 60.302 Research Literacy
 60.427 Classroom Management and Effective Discipline
 62.121 Introduction to Early Childhood Education
 62.304 Environmental Education for the Elementary School Teacher
 62.322 Seminar in Learning Experiences with Young Children
 62.376 Language Experiences for Children
 62.389 Individualized Instruction Activities in the Elementary School
 62.400 Workshop in Teaching Mathematics in Early Childhood and Elementary

Education

- 62.410 Methods and Materials in Early Childhood Education I
 62.420 Methods and Materials in Early Childhood Education II
 62.450 Methods of Teaching Foreign Languages in the Elementary School
 62.480 A Study of Discipline in the Elementary School
 79.312 Internship in Education (1 to 3 semester hours only in this area)

An area of concentration is optional.

Internship or free electives if necessary to complete graduation requirements.

Dual Certification in Early Childhood and Elementary Education

Recommended General Education Courses

A total of 54 semester hours in General Education courses is prescribed for this dual certification program inclusive of 6 semester hours in mathematics, 3 semester hours in biology, 3 semester hours in physical science, and 12 semester hours in social science elected from three of the groupings listed in the section on General Education Requirements. This should include at least 6 semester hours in composition and 3 semester hours in literature.

Required Courses

These courses develop knowledge of the nature of the child, the nature of the school, the learning process, general methods of teaching, methods of teaching particular subjects, and to provide student teaching experience. A total of 65 semester hours in required courses is taken. None may be taken on a pass/fail basis.

- 60.201 Field Studies in Education I
 60.204 Educational Computing and Technology
 60.251 Psychological Foundations of Education
 60.291 Principles of Teaching
 60.301 Field Studies in Education II
 60.311 Educational Measurements and Evaluation
 60.375 Teaching the Reluctant Reader
 60.393 Social Foundations of Education or 60.394 Education in an Urban Society

- 60.497 Teaching in Education: First Experience
 60.498 Teaching in Education: Second Experience
 62.121 Introduction to Early Childhood Education
 62.302 Teaching Science in the Elementary School
 62.310 Teaching Fine Arts in the Elementary School
 62.322 Seminar in Learning Experiences with Young Children
 62.371 Teaching Reading in the Elementary School
 62.373 Diagnostic and Remedial Reading
 62.390 Teaching Social Studies in the Elementary School
 62.391 Teaching Language Arts in the Elementary School
 62.398 Teaching Mathematics in the Elementary School
 62.410 Methods and Materials in Early Childhood Education I
 62.420 Methods and Materials in Early Childhood Education II

Elective Courses

- A minimum of 9 semester hours is taken in elective courses. None of these courses may be taken on a pass/fail basis.
- 05.311 Methods and Materials in Elementary School Physical Education
 05.320 Health and Safety in the Elementary School
 20.384 Literature for Children
 30.205 Children's Art
 60.302 Research Literacy
 60.427 Classroom Management and Effective Discipline
 62.304 Environmental Education for the Elementary School Teacher
 62.376 Language Experiences for Children
 62.389 Individualized Instruction Activities in the Elementary School
 62.400 Workshop in Teaching Mathematics in Early Childhood and Elementary Education
 62.450 Methods of Teaching Foreign Languages in the Elementary School
 70.256 The Gifted Child
 79.312 Internship in Education (1 to 3 semester hours only in this area)
- An area of concentration is optional.
- No free electives are available for this program.

Secondary Education (7-12)

General Education Courses

Some courses which satisfy General Education requirements are included in the course listings for the individual areas of specialization under secondary education.

Required Courses

- A total of 35 semester hours in required courses is taken for this major.
- 60.201 Field Studies in Education I
 - 60.204 Education Computing and Technology
 - 60.251 Psychological Foundations of Education
 - 60.291 Principles of Teaching
 - 60.301 Field Studies in Education II
 - 60.311 Educational Measurements and Evaluation
 - 60.393 Social Foundations of Education or 60.394 Education in an Urban Society
 - 60.497 Teaching in Education: First Experience
 - 60.498 Teaching in Education: Second Experience
 - 65.351 to 65.358 an appropriate subject matter methods course
 - 65.374 Teaching of Reading in Academic Subjects

Free Electives

If necessary to complete the minimum graduation requirements of 128 semester hours.

Areas of Specialization in Secondary Education

Each area of specialization develops scholarship basic to teaching the content subject. Course requirements are enumerated under the area of specialization.

Biology

Biological and Allied Health Sciences 50.110, 50.120, 50.233, 50.242, 50.271, 50.332, 50.351, 50.380; Chemistry 52.115, 52.131, 52.216 and 52.341; Earth and Space Science 51.101 or 51.255 or 51.259; Physics 54.103 or 54.105, or 54.106 or 54.110; 9 semester hours of elective courses in biology including 3 semester hours in a field course; plus Mathematics 53.113 or 53.123, 53.141 or Psychology 48.160.

Chemistry

Chemistry 52.115, 52.131, 52.216, 52.232, 52.321, 52.341, 52.361, 52.362 and 52.281; Physics: 54.211, 54.212; Mathematics: 53.125, 53.126, 53.225; Computer Science 53.175; Biological and Allied Health Sciences 50.110 or 50.120; Earth Science/Geology 51.101 and 51.111 or 51.102 and 51.112.

Communications/Media

English 20.302, 20.311, and 20.312; Theater Arts 26.102; Mass Communications 27.315; and one course in World Literature:

- Group 1 Mass Communications 27.310, 27.360, 27.420;
- Group 2 Two courses from 27.110, 27.275, 27.230, 27.251, 27.261;
- Group 3 Three courses from 27.271, 27.334, 27.352, 27.371, 27.482, 27.485

Communication/Speech

English 20.302, 20.311, 20.312; one course in World Literature; one course in Mass Communications; Speech Communication 25.104, 25.206 or 25.241, 25.205 or 25.215 or 25.315; Theater Arts 26.102 and one course from 26.211, 26.215, 26.316, 26.416; and four courses selected from the Code 25 course listing.

Note: 25.103 Public Speaking is required for secondary education majors and is listed among the General Education courses for communication. One semester of 25.108 Forensic Practicum also is required and; therefore, it may not be applied toward this requirement. Speech Communication majors must participate in the Bloomsburg University Forensic Society for a minimum of one semester under 25.108. A grade of pass/fail is issued.

Communication/Theater

English 20.302, 20.311, 20.312; one course in World Literature; one course in Mass Communications; Speech Communication 25.206 or 25.241; Theater Arts 26.102, 26.211, 26.215 or 26.316 or 26.416; plus four courses from the Code 26 course listing. Note: 25.103 Public Speaking is required for secondary education majors and is listed among the General Education courses for communication. One semester of 26.108 Theater Practicum also is required and; therefore, it may not be applied toward this requirement. Theater/Communication majors must participate in the Bloomsburg University Players for a minimum of one semester under 26.108. A grade of pass/fail is issued.

Earth and Space Science

Earth Science/Geology 50.101, 51.101, 51.102, 51.105, 51.111, 51.112, 51.255, 51.259; Chemistry 52.115, 52.131 or 52.216; Physics 54.111, 54.112; Computer Science 53.175; one course from Mathematics 53.112, 53.113, 53.123, 53.125, 53.126; three courses from Earth Science/Geology 51.105, 51.261, 51.262, 51.355, 51.360, 51.365, 51.369, 51.370, 51.451, 51.453, 51.461, 51.462, 51.468, 51.470; and a maximum of 3 semester hours in marine science courses offered by the Marine Science Consortium and listed under Code 55 in the Biology section.

English

English 20.203 is required in place of 20.200, 20.201 and also is required of those students who have taken 20.104. Required courses, totaling 30 semester hours, are: English 20.226, 20.236 or 20.237, 20.246 or 20.247, 20.256 or 20.257; and 20.302 or 20.306; 20.311, 20.312, 20.352 and 20.363. Elective courses account for 12 semester hours and are drawn from 300 or 400 level English courses; only one may be from 20.300 or 20.301 or 20.303.

French

French 10.203, 10.204, 10.205, 10.206, 10.207, 10.211, 10.325, 10.402, 10.422, 10.423; and English 20.311 or 20.411. Electives: 10.281, 10.290, 10.295, 10.309, 10.331, 10.401, 10.409, 10.490. *Note: A student exempted from a required course must substitute the course in child psychology and anthropology in this curriculum.*

General Science

Biological and Allied Health Sciences 50.110, 50.120; Chemistry 52.115 and 52.131 or 52.216; Physics 54.111 or 54.211, 54.112 or 54.212; Earth Science/Geology 51.101, 51.102, 51.111; Mathematics 53.123, 53.141 or 53.241; Philosophy 28.303; History 42.250; one additional science course, Physics 54.110 or any 200 level or above science course; 16 semester hours of additional science courses.

Mathematics

Mathematics 53.125, 53.126, 53.185, 53.225, 53.226, 53.231, 53.241, 53.310, 53.314, 53.360; Computer Science 56.121; and 9 semester hours in courses which must include at least one computer science course numbered 56.122 or higher and at least one mathematics course numbered 53.271 or higher.

Physics

Physics 54.211, 54.212, 54.302, 54.310, 54.314, 54.315, 54.318, 54.400; Biology 51.101; Chemistry 52.115, 52.216; Earth Science/Geology 51.102; Mathematics 53.125, 53.126, 53.225, 53.322. Select an elective course in physics totaling 3 semester hours.

Spanish

Spanish 12.203, 12.204, 12.205, 12.206, 12.207, 12.211, 12.214, 12.325, 12.331, 12.402, 12.421; and English 20.311 or 20.411. *Note: A student exempted from a required course must substitute the course with an advanced elective in Spanish. Students also should include a course in child psychology and anthropology in their curriculum.*

Comprehensive Social Studies

Anthropology

Anthropology 46.200, 46.210, 46.220, 46.340, 46.390, and 46.440; Sociology 45.211; Economics 40.211, 40.212; History 42.112, 42.113, 42.121, 42.122, and 42.222; Geography 41.101, 41.102; Political Science 44.101, 44.120.

Economics

Anthropology 46.200; Sociology 45.211; Economic 40.211; 40.212, 40.311, 40.312, 40.313, 40.422 or 40.423; plus 9 semester hours from 40.315, 40.316, 40.410, 40.413, 40.415, 40.424, 40.433, and 40.434; History 42.112, 42.113, 42.121, 42.122 or 42.222; Geography 41.101, 41.102; Political Science 44.101, 44.120

Geography

Anthropology 46.200; Sociology 45.211; Economics 40.211, 40.212; History 42.112, 42.113, 42.121, 42.122 or 42.222; Political Science 44.101, 44.120; Psychology 48.101; Geography 41.101, 41.102, 41.105; plus 18 semester hours in geography; and 3 semester hours taken from economics, sociology, political science or history, or Psychology 48.210.

History

Anthropology 46.200; Economics 40.211, 40.212; Geography 41.101, 41.102; Political Science 44.101, 44.120; History 42.112, 42.113, 42.121, 42.122, 42.398; plus 9 semester hours from 42.141, 42.142, 42.143 or 42.228, 42.144, 42.452; 3 semester hours in history selected from 42.372, 42.379, 42.381, 42.383, 42.385, 42.392; and 3 semester hours in history selected from 42.133, 42.319, 42.320, 42.326, 42.327, 42.328.

Philosophy

Anthropology 46.200; Sociology 45.211; Economics 40.211, 40.212; History 42.112, 42.113; 42.121, 42.122; Geography 41.101, 41.102; Political Science 44.101, 44.120; Philosophy 28.111, 28.212, 28.220 or 28.290, 28.224 or 28.351; plus one elective course from the Code 28 listing.

Political Science

Anthropology 46.200; Sociology 45.211; Economics 40.211, 40.212; History 42.112, 42.113, 42.121 or 42.122; Geography 41.101, 41.102; Political Science 44.101, 44.120, 44.160, 44.210, 44.280, and three courses selected from 44.207, 44.363, 44.366, 44.376, 44.440, 44.448, 44.452, and 44.487. *Note:* 44.207 can be used to satisfy the values requirement in General Education.

Psychology

Anthropology 46.200; Sociology 45.211; Economics 40.211, 40.212; History 42.112, 42.113, 42.121, 42.122, 42.222; Geography 41.101, 41.102; Political Science 44.101, 44.120; Psychology 48.101, 48.160, 48.251, 48.281, 48.451, 48.476, plus additional courses in psychology totaling 6 semester hours.

Sociology

Anthropology 46.200; Economics 40.211, 40.212; History 42.112, 42.113, 42.121, 42.122, 42.222; Geography 41.101, 41.102; Political Science 44.101, 44.120; Sociology 45.211, 45.213, 45.133 or 45.236, 45.216 or 45.462, 45.231 or 45.318; and 6 semester hours taken from the preceding sociology courses not previously taken.

Educational Foundations (Code 60)

60.201 Field Studies in Education I (1) — Field trips to observe various teaching-learning situations. Students required to develop competence in operating all audiovisual equipment. On-campus seminars by arrangement with the instructor. *Prerequisite: 30 semester hours*

60.204 Educational Computing and Technology (3) — Introduction to computer technology and the school setting that utilizes computers. *Prerequisite: 45 semester hours*

60.251 Psychological Foundations of Education (3) — Reviews psychological foundations of education, individual differences, learning theories applied to a classroom situation, phys-

ical and mental growth, mental hygiene, and personality development. *Prerequisite: 48.101*

60.291 Principles of Teaching (3) — Designed as a competency-based course enabling the student to develop an awareness of the teaching process as it sequentially develops. Various instructional techniques, methodologies, and approaches explored. Topics include: specifying instructional/behavioral objectives, sequencing learning activities, applying the various taxonomies, conducting micro-teaching, discipline strategies, questioning techniques, and mastery teaching. Class term project includes unit lesson plan, and evaluative instrument construction. *Prerequisites: 60.201, 60.251*

60.301 Field Studies in Education II (1) — Active involvement in a school setting two to three hours per week for approximately 10 weeks. Remaining time spent in campus class seminars by arrangement with instructor. *Prerequisite: 60 semester hours*

60.302 Research Literacy (3) — Provides an introduction to research methods and techniques. Gives the student the basic understanding to be a better consumer of research, to be more aware of the value of research, and to be able to carry out beginning-level research projects.

60.311 Classroom Measurement and Evaluation (3) — Reviews principles of evaluation; grading; representative standardized tests; vocabulary of measurement, test construction, and interpretation; informal and formal measurement in the cognitive, effective, and psychomotor areas. *Prerequisite: 45 semester hours*

60.375 Teaching the Reluctant Reader (3) — Addresses methods and materials for the instruction of the disadvantaged child (K-12). Presents techniques and theories as they may be applied to help the socially disadvantaged child function more adequately in the school environment. *Prerequisite: 45 semester hours*

60.393 **Social Foundations of Education (3) — Reviews social processes underlying education, current social forces, the place of the school in American culture, impact of social stratification, and role of the teacher in a period of rapid social change. *Prerequisite: 45 semester hours*

60.394 **Education in an Urban Society (3) — Studies the formal educational settings that serve areas in the United States with high population densities and the social factors that influence education in these settings. Fulfills the

social foundations requirements for certification. *Prerequisite: 45 semester hours*

60.427 Classroom Management and Effective Discipline (3) — Focus on strategies for effective discipline and classroom management. Methods of planning for the beginning of the year and for establishing an effective classroom organization to promote appropriate behavior throughout the year are reviewed. Current models and major theories of discipline are reviewed and evaluated. *Prerequisites: 60.251, 60.291, 60.201, 60.301*

60.431 Independent Study (1-3) — Requires consent of the department chairperson to schedule.

60.441, 60.442, 60.443 Workshop in Education (1-6) — Studies selected areas of education including research by individual students in a special teaching field.

60.451 Pupil Personnel Services in the Public School (3) — A comprehensive view of pupil personnel services in the elementary and secondary schools; school attendance, school health programs, pupil transportation, psychological services, and guidance services.

60.497 Teaching in Education: First Experience (6) — Provides opportunities for direct participating experiences. Places students in classrooms with public or private school teachers. The student's major determines their assignment: K-6 – one experience in a primary level and one experience in an intermediate level of a public school; N-K-3 – one experience in a preschool situation and one in a primary level of a public school or two experiences in a primary level of a public school.

60.498 Teaching in Education: Second Experience (6) — The secondary student teaching assignment is determined by the student's area of specialization.

***Indicates course approved as diversity-focused.*

Early Childhood and Elementary Education (Code 62)

62.121 Introduction to Early Childhood Education (3) — Examines the historical and philosophical foundations of early childhood education. Analyzes current trends and practices for teaching children from birth to age 6.

62.302 Teaching of Science in the Elementary

School (3) — Emphasizes the major methods and materials used in elementary school science. *Prerequisite: 64 semester hours*

62.304 Environmental Education for the Elementary School Teacher (3) — Provides learning experiences for the elementary school level in environmental education programs.

62.310 Teaching Fine Arts in the Elementary School (3) — Provides competencies in the selection and implementation of materials and procedures for teaching literary, visual, and performing arts to elementary school children. Emphasizes comprehension and integration of fine arts into all areas of the school curriculum. *Prerequisite: 45 semester hours*

62.322 Seminar in Learning Experiences with Young Children (3) — Outlines physical, mental, emotional, and social levels of children from birth to age 8, with attention to environmental factors that foster child growth. Examines prenatal, infant-toddler, preschool and kindergarten programs to meet the needs of this age child and to provide the background of experience needed for later ventures into reading, art, arithmetic, science, social studies, music, literature, physical education, and health and safety. *Prerequisites: Psychology 48.101, 48.211*

62.371 Teaching Reading in the Elementary School (3) — Examines developmental reading from readiness through sixth grade. *Prerequisite: 45 semester hours*

62.373 Diagnostic and Remedial Reading (3) — Presents diagnostic and remedial procedures emphasizing both standardized and informal techniques. *Prerequisite: 62.371*

62.376 Language Experiences for Children (3) — Explores the language development of children and factors that influence skill in effective communication development from nursery school through sixth grade. Provides a background for students in language arts and literature for children. *Prerequisite: 45 semester hours*

62.389 Individualized Instruction Activities in the Elementary School (3) — Emphasizes procedures for helping individuals learn the informal school concept and rearranging the elementary classroom into an efficient and effective learning area with emphasis on a language arts center, mathematics center, science centers, and social studies centers. *Prerequisite: 45 semester hours*

62.390 Teaching Social Studies in the Elementary School (3) — Emphasizes methods and materials appropriate for teaching elementary school social studies in contemporary society. *Prerequisite: 64 semester hours*

62.391 Teaching Language Arts in the Elementary School (3) — Emphasizes methods and materials designed to help elementary school children develop communication skills for today's complex society. Includes all areas of a modern language arts curriculum. *Prerequisite: 64 semester hours*

62.398 Teaching Mathematics in the Elementary School (3) — Outlines mathematical methods, materials, understandings, and attitudes essential in the teaching of contemporary programs in the elementary school. *Prerequisite: 64 semester hours*

62.400 Workshop in Teaching Mathematics in Early Childhood and Elementary Education (1-6) — Presents a workshop format to provide individual or group study of problems concerned with teaching mathematics at early childhood and elementary levels.

62.410 Methods and Materials in Early Childhood Education I (3) — Provides teachers with a workshop experience in infant daycare centers and nursery schools. Provides methods and materials that teachers can use and construct in their centers and classrooms. Examines theories of Bruner, Piaget, Froebel, and Montessori. *Prerequisites: 62.121, 62.322*

62.420 Methods and Materials in Early Childhood Education II (3) — Provides teachers with a workshop experience in infant daycare centers and nursery schools. Provides methods and materials that teachers can use and construct in their centers and classrooms. Examines theories of Bruner, Piaget, Froebel, and Montessori. *Prerequisites: 62.121, 62.322*

62.431 Independent Study in Elementary and Early Childhood Education (1-3) — Individual projects in education. *Requires consent of the department chairperson.*

62.450 Methods of Teaching Foreign Languages in the Elementary School (3) — Examines factors influencing second language acquisition and addresses a variety of strategies designed to teach foreign languages in the elementary school. Special focus on integrating the foreign language syllabus within the elementary school curriculum. Culture, art, music and dance included. *Prerequisites: 60.291, 200-level foreign language or equivalent*

Secondary Education (Code 65)

65.351 Teaching Communication in the Secondary School (Fall) (3) — Prerequisites: 60.201, 60.251, 60.291, 60.301, 60.393; Junior standing in an area of concentration in Secondary Education

65.352 Teaching Mathematics in the Secondary School (Spring) (3) — Prerequisites: 60.201, 60.251, 60.291, 60.301, 60.393; Junior standing in an area of concentration in Secondary Education

65.353 Teaching Science in the Secondary School (Fall) (3) — Prerequisites: 60.201, 60.251, 60.291, 60.301, 60.393; Junior standing in an area of concentration in Secondary Education

65.355 Teaching Social Studies in the Secondary School (Fall) (3) — Prerequisites: 60.201, 60.251, 60.291, 60.301, 60.393; Junior standing in an area of concentration in Secondary Education

65.358 Teaching Foreign Language in the Secondary School (Spring) (3) — Prerequisites: 60.201, 60.251, 60.291, 60.301, 60.393; Junior standing in an area of concentration in Secondary Education

65.374 Teaching Reading in Academic Subjects (3) — Understanding techniques for developing reading skills applicable to the secondary school. Emphasis on readiness, comprehension, silent reading, and oral reading through secondary school academic subjects. *Prerequisite: 45 semester hours*

65.411 Seminar in Secondary Education (3) — Activities center around concerns and problems encountered in secondary education. The range of activities is determined by individual need and by levels of professional competency including diagnosis, mutual development of objectives, and self evaluation.

65.431 Independent Study in Secondary Education (1-3) — Requires consent of department chairperson.

Professional Studies (Code 79)

79.312 Internship in Education (1-15) — A work study program in an education-related setting applicable to fulfilling free electives in teacher education degree programs.

Engineering and Liberal Arts

Program Coordinator

Gunther L. Lange, assistant professor, Department of Physics

Advisory Committee

Stephen D. Beck, professor, Department of Mathematics and Computer Science

Marlana Blackburn, assistant professor, Department of Chemistry

Norman M. Gillmeister, associate professor, Department of Geography and Earth Science

Gunther L. Lange, assistant professor, Department of Physics

Degree Program

A 3/2 cooperative dual-degree program: Bachelor of Arts in Physics or Mathematics from Bloomsburg University and Bachelor of Science in an engineering discipline from The Pennsylvania State University or Wilkes University

Goals and Objectives

The engineering and liberal arts program provides the opportunity for students to pursue a rewarding and challenging career in the high-demand field of engineering without forgoing the broader scope of a Bloomsburg University educational experience. This cooperative program of study leads to two baccalaureate degrees, one in liberal arts and sciences awarded by Bloomsburg University and one in an area of engineering from either The Pennsylvania State University or Wilkes University. Candidates for these degrees spend three years at Bloomsburg University, where they study science, mathematics, pre-engineering, and a broad variety of liberal arts subjects, followed by two years at the University Park campus of Penn State or at Wilkes University in Wilkes-Barre, where they study engineering disciplines.

Students may pursue an engineering education in any of the following areas:

Aerospace Engineering *Penn State*

Agricultural Engineering *Penn State*

Ceramic Science and Engineering *Penn State*

Chemical Engineering *Penn State*

Civil Engineering	<i>Penn State</i>
Computer Engineering	<i>Penn State</i>
Electrical Engineering	<i>Wilkes or Penn State</i>
Engineering Management	<i>Wilkes</i>
Engineering Science	<i>Penn State</i>
Environmental Engineering	<i>Wilkes</i>
Industrial Engineering	<i>Penn State</i>
Materials Engineering	<i>Wilkes</i>
Mechanical Engineering	<i>Wilkes or Penn State</i>
Metals Science and Engineering	<i>Penn State</i>
Mining Engineering	<i>Penn State</i>
Nuclear Engineering	<i>Penn State</i>
Petroleum and Natural Gas Engineering	<i>Penn State</i>

Required Courses

All students in this program must complete the following 48 semester hours at Bloomsburg University plus additional courses specific to their field of interest in engineering.

Physics (11 semester hours) — 54.211 General Physics I, 54.212 General Physics II, 54.310 Modern Atomic Physics

Chemistry (8 semester hours) — 52.115 Fundamentals of Inorganic Chemistry and 52.216 Chemical Principles and Measurements

Mathematics (18 semester hours) — 53.125 Analysis I, 53.126 Analysis II, 53.225 Analysis III, 53.226 Analysis IV, 53.322 Differential Equations, 53.314 Linear Algebra

Computer Science (3 semester hours) — 56.210 Algorithmic Processes

Pre-Engineering (8 semester hours) — Only offered alternate years, 54.301 Mechanics: Statics, 54.302 Mechanics: Dynamics, 51.173 Introductory Engineering Graphics, 51.174 Engineering Design Graphics

Program-Specific Course Requirements

Candidates planning to pursue an engineering degree at Wilkes University must take the following courses: Physics, 54.315 Electronics (4 semester hours) or 54.400 Advanced Physics Laboratory (2 semester hours), and one of the following: 09.213 Science, Technology, Human Values (3 semester hours); 41.105 Environmental Issues and Choices (3 semester hours); or 44.207 Ethics, Politics, and Public Policy (3 semester hours)

Candidates planning to pursue an engineering degree at Penn State must take 25.103 Public Speaking (3 semester hours).

Candidates in certain engineering programs also must meet additional course requirements. These course requirements are as follows:

Aerospace, Electrical or Nuclear Engineering — 53.491 or 53.492 in Partial Differential Equations (3 semester hours)

Chemical or Materials Engineering— 52.131 Fundamentals of Organic Chemistry (4 semester hours); 52.232 Intermediate Organic Chemistry (4 semester hours). Chemical engineering students are excused from 54.302 Mechanics: Dynamics

Environmental Engineering — 52.131 Fundamentals of Organic Chemistry (4 semester hours); 52.232 Intermediate Organic Chemistry (4 semester hours) or 50.173 Anatomy and Physiology I (4 semester hours); 50.174 Anatomy and Physiology II (4 semester hours)

Engineering Management — 53.141 Introduction to Statistics (3 semester hours) or 53.241 Probability and Statistics (3 semester hours); 40.211 Principles of Economics I (3 semester hours); 40.212 Principle of Economics II (3 semester hours)

Mining Engineering — 51.101 Physical Geology (3 semester hours); 51.261 Mineralogy (4 semester hours)

Petroleum and Natural Gas Engineering — 51.101 Physical Geology (3 semester hours); 51.102 Historical Geology (3 semester hours)

Additional Course Requirements

In addition to the above requirements, all candidates must satisfy the General Education requirements of Bloomsburg University and the specific requirements for the B.A. degree in either physics or mathematics. Students should consult the program coordinator each semester as they plan their schedules. With careful planning, it is possible to satisfy all of the requirements indicated during the student's three-year residence at Bloomsburg University.

Required Academic Performance

Students wishing to complete their studies at The Pennsylvania State University must maintain a quality point average (QPA) of 3.0 overall and a 2.75 in required core courses. In a few majors, a 2.5 overall average may be sufficient for transfer, and these are subject to change from year to year.

For transfer to Wilkes University, students

must maintain a QPA of 2.5 overall. Transfer candidates to the environmental engineering, materials engineering, and engineering management programs are required to have a 2.65 QPA in science, mathematics, and pre-engineering courses, while candidates to the electrical engineering program must maintain a 2.75 average in these technical courses.

Admission Procedures

To enter the program, individuals need only apply and be accepted for admission to Bloomsburg University. However, applicants should be aware that any engineering program requires the application of strong mathematical and problem-solving skills. It is expected that the student's high school mathematics background is sufficient for enrollment in 53.125, the initial course in the required calculus sequence, during the first semester of study.

Applicants for admission who previously were registered as degree candidates and established an academic record as degree candidates at The Pennsylvania State University prior to entering this cooperative program at Bloomsburg University will be considered readmission candidates and must meet additional enrollment criteria for readmission to The Pennsylvania State University.

Students should indicate a desire to follow this program of study at the time of admission to Bloomsburg University in order to insure sufficient time to complete all of the required courses. Notification should be made to the director of academic advisement who, in turn, will notify the coordinator of the Engineering and Liberal Arts Program. The coordinator will assign each student an academic adviser who is a member of the Pre-Engineering Advisory Committee. Students should consult both their advisers and the coordinator for assistance in schedule planning. At the end of the second year of study, students become candidates for transfer if they have maintained a sufficiently high QPA.

Transferring to The Pennsylvania State University

In September of the third year of study, students should apply for transfer to The Pennsylvania State University. All correspondence and the application should clearly indicate that the transfer is requested under a cooperative 3/2 program. Nov. 30 is the application deadline. Successful applicants will be offered provisional admission to Penn State for the fol-

lowing fall semester.

Completed applications should be supported by the following documentation:

- An official transcript of the applicant's final secondary school grades;
- Two official transcripts of the applicant's Bloomsburg University academic record including all grades earned;
- A schedule of all courses to be taken in the third year;
- A letter of recommendation from the Pre-Engineering Advisory Committee.

At the end of the third year of study, two copies of the student's official Bloomsburg University transcript should be forwarded to the Admissions Office of The Pennsylvania State University. Students who have maintained the required quality point average, who have completed all required courses, and who are recommended by the Pre-Engineering Advisory Committee, will be offered permanent admission to Penn State.

Transferring to Wilkes University

At the beginning of the third year of study, students should apply for transfer to Wilkes University through the coordinator of the program at Bloomsburg University. Applications are available in the coordinator's office.

Completed applications should be supported by the following credentials:

- An official transcript of the applicant's final secondary school grades;

- An official Bloomsburg University transcript of the applicant's grades including all grades earned during the first two years;
- A schedule of all courses to be taken during the third year.

The Pre-Engineering Advisory Committee reviews these credentials and submits a recommendation to the dean of admissions of Wilkes University. Successful applicants will be offered provisional admission to Wilkes University for the following summer.

At the end of the third year, a copy of the student's official Bloomsburg University transcript should be submitted to the coordinator. Students who have maintained the required quality point average, who have completed all the required courses, and who are recommended by the Pre-Engineering Advisory Committee, will be offered permanent admission to Wilkes University.

Receiving a Bloomsburg University Degree

In January of the student's final year in engineering college, the student should send an official transcript of all courses taken to the registrar at Bloomsburg University. A letter indicating intent to graduate should be sent to the coordinator of the Engineering and Liberal Arts Program so that course evaluations can be made. The registrar, upon evaluation of the transcript, will arrange for a diploma to be awarded at the university's May graduation.

Department of English

Faculty

- William M. Baillie, Chairperson, Professor — B.A., Ball State Teachers College; M.A., Ph.D., University Of Chicago
- S. Ekema Agbaw, Assistant Professor — B.A., University of Yaounde; M.A., University of Leeds; Ph.D., University of Connecticut
- M. Dale Anderson, Associate Professor — B.S.L., Nebraska Christian College; M.A., Fort Hays Kansas State College; Ph.D., Indiana University of Pennsylvania
- Mary-Jo Arn, Associate Professor — B.A., Westminster College; Ph.D., State University of New York at Binghamton
- Mary G. Bernath, Associate Professor — B.A., M.A., Ph.D., University Of Pittsburgh
- Janice Broder, Assistant Professor — B.A., Mount Holyoke College, M.A., University of Michigan; M.A., Ph.D., Brandeis University
- William D. Eisenberg, Associate Professor — B.A., University Of Delaware; M.A., Lehigh University
- Ronald A. Ferdock, Associate Professor — A.B., St. Vincent College; M.A., The Pennsylvania State University
- Lawrence B. Fuller, Professor — A.B., Dartmouth College; M.A., Columbia University; Ph.D., The Johns Hopkins University; M.A., The Pennsylvania State University
- Nancy E. Gill, Associate Professor — B.A., M.A., Washington State University; Ph.D., The Pennsylvania State University
- Ervene F. Gulley, Professor — A.B., Bucknell University; M.A., Ph.D., Lehigh University
- S. Michael McCully, Associate Professor — B.A., Hendrix College; M.A., Western Illinois University; Ph.D., University Of Iowa
- Edwin P. Moses, Assistant Professor — B.A., Kansas State University; Ph.D., State University Of New York At Binghamton
- Francis J. Peters, Professor — B.A., Belmont Abbey College; M.A., Seton Hall University; Ph.D., New York University
- Marion B. Petrillo, Assistant Professor — B.A., Wilkes College; M.A., Duquesne University; Ph.D., State University Of New York At Binghamton
- David S. Randall, Assistant Professor — B.A.,

State University of New York at Potsdam; M.A., Ph.D., State University of New York at Binghamton

Terrance J. Riley, Associate Professor, Director, University Writing Center — B.A., M.A., Ph.D., University Of Michigan

Danny L. Robinson, Associate Professor — B.A., Northern Arizona University; M.A., Purdue University; Ph.D., Duke University

Glenn E. Sadler, Professor — A.B., Wheaton College; M.A., University Of California At Los Angeles; Ph.D., University Of Aberdeen, Scotland

Sabah A. Salih, Assistant Professor — B.A., University of Baghdad, M.A., Ph.D., Southern Illinois University

Riley B. Smith, Associate Professor — B.A., Ph.D., The University Of Texas, Austin

Louise M. Stone, Assistant Professor — B.A., M.A., University Of Michigan

Julie Vandivere, Assistant Professor — B.A., University of Utah; M.A., Brigham Young University; M.A., Ph.D., Cornell University

Degree Program

Bachelor of Arts in English

A total of 48 semester hours is required for a major in English.

Goals and Objectives

The department offers a program leading to a Bachelor of Arts in English and provides the English courses for Bachelor of Science in Education in two areas of concentration, English and Communication, which culminate in certification for teaching in secondary schools.

The department also offers a minor in English.

The discipline of English provides training in intensive reading, critical thinking, creative writing and language study.

Required Courses

Required courses include: 20.203, 20.226, 20.236, 20.237, 20.246, 20.247 and 20.363; 20.256 or 20.257; 20.386 or 20.387; 20.488 or 20.489; 20.492 or 20.493; 20.311, 20.312, 20.411, or 20.413; 20.334, 20.335, 20.431, 20.432, 20.433, 20.434, 20.436.

Also, choose one course from 20.341, 20.342, 20.344, 20.345, 20.346, 20.347, 20.364, 20.370, or 20.375; 20.301, 20.302, 20.303, 20.306, 20.370, 20.372, 20.373, 20.374, 20.375, 20.377 or 20.379; and two other 300-400 level literature courses. No course may be used to satisfy more than one requirement.

Minor in English — 20.226 European Literature I, 20.237 American Literature II, 20.247 British Literature II, 20.363 Shakespeare, and two English courses at the 300-400 level, excluding 20.384 and 20.385.

English (Code 20)

When 20.203 is listed as a prerequisite, any 100-level or 200-level literature course may be substituted as the prerequisite.

20.101 Composition I (3) — Study and practice of the principles of composition to improve proficiency in writing skills.

20.104 Honors Composition (3) — Similar to 20.101 but offered only to freshmen exempted from 20.101 on the basis of admission criteria. Study and practice in short and long essays and in research-supported writing. *Students who successfully complete 20.104 are exempt a second writing course requirement.*

20.111 Language and Social Interaction (3) — A study of varieties of language, verbal and non-verbal, and their communicative and social functions.

20.112 Practical Grammar and Usage (3) — A study of grammatical forms, rules, and accepted usage of current written standard English, with practical application to improve diction, sentence structure, and style.

20.131 The Bible as Literature (3) — Examination of literary types found in the Old and New Testaments and their profound influence on Western culture. *Not applicable toward a major in English.*

20.151 Introduction to Literature (3) — Exploration of literature as experience and the techniques by which it communicates in short story, novel, drama, and poetry.

20.152 Literature and Society (3) — Readings selected for consideration of purposes, characteristics, issues, and values of specific areas (such as business, psychology, or science) from a humanistic perspective.

20.153 Folklore (3) — A survey of such traditional forms of oral literature as epic, ballad,

folksong, folktale, and superstitions examined in terms of origin, transmission, and influence on literature.

20.154 Folklore of the American West (3) — A study of folklore genres, including legends, tall tales, ballads, and customs of Native Americans, English, French, and Spanish of the Trans-Mississippi West.

20.156 Popular Literature (3) — Study of one type of popular literature (such as detective fiction, science fiction, literature of terror, or popular drama) and examination of its forms, conventions, and ideas. Course content varies with each presentation of the course.

20.200 Writing Proficiency Examination (3) — A series of compositions written under examination conditions on topics provided by the staff. Faculty consultations and a writing laboratory are available for students in the course. *Not for English majors. Prerequisite: 20.101*

20.201 Composition II (3) — Intermediate-level study and practice in composition, reinforcing and expanding basic writing skills. Instruction in short and long essays and in research-supported writing. *Prerequisite: 20.101 or consent of department chairperson*

20.203 Approaches to Literary Study (3) — An introduction to writing about literature; a consideration of research techniques and types of literary analysis. *Satisfies requirement for Composition II. Required for all English majors. Prerequisite: 20.101 or 20.104; open to all students*

20.226 European Literature I (3) — Major Continental literary works in translation from the classical Greek period through the Renaissance, including Biblical backgrounds.

20.227 European Literature II (3) — Major Continental literary works in translation from the 17th century to the present.

20.236 American Literature I (3) — Survey of American literature from its colonial beginnings through the Civil War.

20.237 American Literature II (3) — Survey of American literature from the Civil War through the modern era.

20.246 British Literature I (3) — Survey of British literature from *Beowulf* through Samuel Johnson.

20.247 British Literature II (3) — Survey of British literature from the Romantics through the modern era.

20.256 Non-Western Literature I (3) — Study of a literature or literatures outside the tradi-

tions of European-American cultures.

20.257 Non-Western Literature II (3) — Study of a literature or literatures outside the traditions of European-American cultures, differing from 20.256 by either the literature(s) or the works studied.

20.280 Poetry (3) — Exploration of the nature of poetry in terms of its aims, forms, and substance.

20.300 Writing Children's Literature (3) — Approaches to and practice in writing children's books for publication. Consideration of various literary types and techniques with discussion of field research in writing nonfiction, fiction, and poetry for children. *Prerequisite: 20.351 or 20.352 or consent of the instructor*

20.301 Creative Writing: Fiction (3) — Original creative work in fiction; critical analysis by the instructor and the class in group discussion.

20.302 Advanced Composition (3) — Advanced study of writing nonfiction prose: form, style, audience, editing, evaluation. *Prerequisite: 60 semester hours*

20.303 Creative Writing: Poetry (3) — Lecture and discussion concerning the fundamental theory and techniques of poetry writing together with writing and evaluation of poems in a workshop situation. *Prerequisite: 20.280 or 20.379 or consent of the instructor*

20.306 Theory and Practice of Writing (3) — Introduction to new theories of writing and the teaching of writing including both study of and practice in the methods the theories require. Recommended for secondary education students in English, but open to all students interested in advanced work in writing. *Prerequisite: 45 semester hours*

20.311 Structure of English (3) — Study of the sound patterns, morphology, word formation processes, semantics, and syntax of modern English, and of children's acquisition of their first language. *Prerequisite: 45 semester hours*

20.312 History of the English Language (3) — Survey of the major developments in the English language from its Anglo-Saxon origins to the present. *Prerequisite: 60 semester hours or consent of the instructor*

20.334, 20.335 Studies in American Literature (3) — Major American writers instrumental in shaping and interpreting the American experience. Writers vary with each presentation of the course. *Prerequisite: 20.203*

20.341 Medieval Literature (3) — Major works

of the Old and Middle English periods (the former in translation) that relate to a common theme, period, or genre (such as drama or metrical romance), generally excluding the works of Chaucer. *Prerequisite: 20.203*

20.342 The Renaissance (3) — The poetry and nondramatic prose of the 16th and 17th centuries (to 1660), excluding the works of Milton. *Prerequisite: 20.203*

20.344 The Neoclassical Age (3) — The prose, poetry, and drama of the period from 1660 through the end of the 18th century.

20.345 Romantic and Victorian Literature (3) — The poetry and prose of the late 18th and 19th centuries.

20.346, 20.347 Studies in British Literature (3) — Major writers instrumental in shaping and interpreting the British experience. Writers vary with each presentation of the course. *Prerequisite: 20.203*

20.363 Shakespeare (3) — Study of Shakespeare's plays with emphasis on Shakespeare as poet and playwright and attention to conditions of the Elizabethan theater and history of the Shakespearean text. *Prerequisite: 20.203*

20.364 Chaucer (3) — Chaucer's major poetry (with practice in speaking and reading Middle English) including consideration of the medieval social and intellectual contexts of his work. *Prerequisite: 20.203*

20.365 Milton (3) — The poetry and prose of John Milton considered in the contexts of his age, his puritanism, and his learning. *Prerequisite: 20.203*

20.370 The English Novel (3) — History and development of the novel in England from its inception to the end of the 19th century. *Prerequisite: 20.203*

20.372 Modern Novel (3) — Major modern novels, with emphasis on developments in fictional art. Writers vary with each presentation of the course. *Prerequisite: 20.203*

20.374 Short Story (3) — The history, characteristics, and techniques of the modern short story. *Prerequisite: 20.203*

20.375 Renaissance Drama (3) — The plays of Shakespeare's predecessors and contemporaries and those of later Jacobean and Caroline dramatists. *Prerequisite: 20.203*

20.377 Modern Drama (3) — Major Continental, English, and American plays from Ibsen to the present with emphasis on contemporary attitudes, themes, and style. *Prerequisite: 20.203*

20.379 Modern Poetry (3) — A survey of con-

emporary poetry and poetic movements. *Prerequisite: 20.203*

20.384 Literature for Children (3) — Studies the development of literature for children, including consideration of criteria for selecting literature for the classroom and library and methods for presenting literary works in an elementary classroom. *Not applicable toward a major in English. Prerequisite: 60 semester hours*

20.385 Literature for Young Adults (3) — Critical discussion of literature aimed at young adult readers or popular with them, by such writers as S.E. Hinton, Robert Cormier, Judy Blume, and Paul Zindel. Consideration of literary works for the secondary classroom with attention to the subject of censorship. *Not applicable toward a major in English. Prerequisite: 60 semester hours*

20.386, 20.387 Studies in Contemporary Literature (3) — Study of a topic, author, or movement significant in post-World War II literatures. Course content will vary. *Prerequisite: 20.203*

20.411 Modern Linguistic Theory (3) — A survey of modern developments in linguistics, including transformational-generative grammar; applications of theory to patterns of language acquisition; current adaptations of theory for presentation as grammar in schools. *Prerequisite: 60 semester hours*

20.413 Language in American Society (3) — Review of social, political, and philosophical perspectives on the historical development and current status of English and other languages in American society. *Prerequisite: 60 semester hours*

20.431 American Romanticism (1820-1865) (3) — An advanced course in the significant literary and cultural movements and writers of the period 1820-1865. Special emphasis given to the works of Irving, Cooper, Emerson, Hawthorne, Poe, Thoreau, Melville, Douglass, Whitman and Dickinson. *Prerequisite: 45 semester hours, including 20.203*

20.432 American Realism (1865-1914) (3) — Study of American literature between the Civil War and 1914. Content varies, but will include Twain, Howells, James, Wharton, Crane and Dreiser. *Prerequisite: 45 semester hours, including 20.203*

20.433 American Modernism (1914-1945) (3) — Consideration of significant fiction, drama and poetry written between 1914 and 1945, with emphasis on writers and texts reflecting the social, political, intellectual and artistic diversity of the period. *Prerequisite: 45 semester*

hours, including 20.203

20.434 Contemporary American Literature (3) — Consideration of significant fiction, drama and poetry since World War II, with emphasis on writers and texts reflecting the social, political, intellectual and artistic diversity of the period. *Prerequisite: 45 semester hours, including 20.203*

20.436 African-American Literature (3) — A detailed study of one of the three major areas in African-American literature: the African-American novel, the Harlem Renaissance or African-American Writers. *Prerequisite: 45 semester hours, including 20.203*

20.481 Special Topics (3) — Study of a topic in literature; topic varies with each presentation of the course.

20.488, 20.489 Seminar (3) — An opportunity to explore, at an advanced level, a literary or linguistic subject not offered in regularly scheduled courses. Content determined by the instructor. *Prerequisite: 60 semester hours*

20.492 Literary Theory and Criticism (3) — Study of traditional literary criticism from Aristotle to the present, as well as of contemporary trends in literary theory, at an advanced level. *Prerequisite: 60 semester hours*

20.493 Bibliography and Literary Research (3) — Investigation of methods of literary scholarship and study of book history and production with practice in preparing specialized bibliographies and planning scholarly projects. *Prerequisite: 60 semester hours*

20.494 Rhetoric of Literature (3) — Study of major rhetorical devices, the nature and range of rhetorical designs; identification of these language devices in drama, prose, and poetry; and discussion of their effects on the reading audience. *Prerequisite: 60 semester hours*

20.495 Independent Study in English (3-6) — *Prerequisite: 60 semester hours*

20.496 Literary Study Abroad (3) — A travel-study course for English majors and non-majors, concentrating on a writer or literary problem in the perspective of the relevant disciplines. Includes meetings with writers and scholars and the use of on-site resources. *Area of emphasis determined by the instructor*

20.497 English Internship (1-12) — A work-study program. *Not applicable toward major or minor in English. Open to English majors; others by departmental consent. Prerequisite: 60 semester hours completed*

Department of Finance and Business Law

Faculty Credentials

David G. Heskel, Chairperson, Associate Professor — M.B.A., Ph.D., University of Business, Vienna, Austria

Barbara E. Behr, Professor — A.B., Cornell University; M.A., Hunter College; J.D., Rutgers Law School

Karen J. Elwell, Associate Professor — A.B., A.M., J.D., University of Illinois at Urbana-Champaign

David G. Martin, Associate Professor — B.A., C. W. Post College; M.B.A., Western Illinois University; Ph.D., University of Alabama

Bruce L. Rockwood, Professor — B.A., Swarthmore College; J.D., University of Chicago Law School

W. Steven Smith, Associate Professor — B.S., M.B.A., University of Georgia; M.A., The Ohio State University; Ph.D., University of Alabama

Degree Program

Bachelor of Science in Business Administration

A total of 63 semester hours is required for a major in finance in the business administration degree program. Other majors include accounting, business administration-economics, finance, management, management information systems, and marketing.

Goals and Objectives

The major in finance provides a perspective of the finance environment such as the functioning of major stocks and bonds markets, the banking system, and international financial markets. It will provide students with educational opportunities that will prepare them to pursue careers in the domestic as well as international financial fields.

Required Courses

A total of 15 semester hours is required for a major in finance. Required courses include: Finance 96.323, 96.343, 96.454, and 6 semester hours from 96.333, 96.413, 96.423, 96.440, 96.463, and 96.473.

Courses required for the degree program in business administration include: Economics 40.211, 40.212, 40.246 or 53.123, and 40.346; Mathematics 53.118; Accounting

91.220 and 91.223; Computer and Information Systems 92.150; Management 93.344, 93.445, and 93.446; Finance 96.313; Marketing 97.310; and Business Law 98.331.

Elective Courses

Select courses in business and economics to complete a minimum of 63 semester hours. Courses designated with a 91, 92, 93, 96, 97, or 98 prefix are business courses and those with a 40 prefix are economics courses. Additional courses permitted as electives include: Speech Communication 25.307; History 42.223 (a substitute for 42.224 and 40.423), 42.472; and General Business 90.101, 90.241, 90.431, and 90.432.

Note: 90.101 will not be allowed for credit as a business elective once a student has completed 6 semester hours in business administration courses.

In selecting an elective, the student must have the proper prerequisites and avoid choosing courses below the level for which the student has already been prepared in the subject field.

General Education Courses

English 20.101 and 20.201 are required as General Education courses.

Free Electives

Select free elective courses as needed to meet the 128 semester hours required for graduation.

Specialization in Business Economics

A total of 18 semester hours is required for specialization in business economics. Courses include: Economics 40.311, 40.312, 40.313, and 40.422 or 40.423, plus one additional economics course (3 semester hours) and one course (3 semester hours) in business.

Finance (Code 96)

96.313 Business Finance (3) — Studies financial management in the areas of asset valuation, risk, working capital management, capital budgeting, cost of capital, financial structure, financing sources, and dividend policy. Prerequisites: Accounting 91.220, Economics 40.211 and 40.212

96.323 Money, Capital Markets, and Financial institutions (3) — Studies short-term money market and long-term capital market instruments, major financial institutions, the relationship between interest rates and security prices, and the role of the consumer and government in financial markets. *Prerequisite: 96.313*

96.333 Commercial Bank Operations (Management) (3) — Covers fundamental principles of bank operations. Includes a survey of various bank functions such as accounting, trust department, international financial services, lending operations, public service, and liability management. *Prerequisite: 96.313*

96.343 Investment Management (3) — Outlines principles of security investments: descriptions of investments instruments, investment planning, security valuation, portfolio theory and strategy, and security markets. *Prerequisite: 96.313*

96.413 International Finance (3) — Studies the principles and practices relevant to understanding the nature of international finance, its problems, and its institutions. Discussion centers on sources and instruments of international export and import financing, balance-of-payments, exchange rates, governmental regulations and policies, financial management, as well as accounting for international transactions. *Prerequisite: 96.313*

96.423 Security Analysis and Portfolio Theory (3) — Detailed analysis of major elements related to determining the earnings and risk potential of securities and study of the underlying principles inherent to portfolio construction. *Prerequisite: 96.343*

96.432 Internship in Finance (1-6) — *Prerequisites: 96.313, Junior or Senior standing, and QPA of 2.50*

96.440 Introduction to Options and Futures (3) — Detailed analysis of major elements affecting market prices of options and futures contracts and analysis of optimal investment strategies involving these derivative instruments. *Prerequisite: 96.343*

96.454 Financial Management Decisions (3) — Studies business financial problems and the development of financial decision-making tools and practices as used in the decision-making role of the financial manager. *Prerequisite: 96.313*

96.463 Seminar in Finance (3) — Explores a wide range of topics in finance, primarily focused in the area of financial management. Designed primarily for senior finance majors.

Prerequisites: 96.313 and 96.343

96.473 Seminar in Investments (3) — Examines a wide variety of topics in the field of investment management and portfolio theory. Designed primarily for Seniors majoring in finance. *Prerequisites: 96.313 and 96.343*

Business Law (Code 98)

98.331 Business Law I (3) — Introduces the nature and sources of law, the judicial system, principles of law applicable to business transactions including contracts, torts, sales, property, and criminal law.

98.332 Business Law II (3) — Presents basic principles of commercial law (UCC), agency, and such topics as debtor/creditor relations, business organizations, and ethics. *Prerequisite: 98.331*

98.340 Law and Literature (3) — An introduction to law and literature, both as an approach to the reading of legal texts and as a means of addressing issues in law, justice and morality as portrayed in works of fiction and other narratives. Modules include slavery, abortion, the death penalty, Native American law and literature and international law and literature. *Prerequisite: 98.331 or consent of the instructor*

98.407 International Legal Environment of Business (3) — Introduction to public and private international law as applied to the increasingly globalized business environment. Cases include: trade law; extraterritorial application of U.S. law; treaty law; U.S.-Japan structural impediments talks; the GATT; the European Community: multinational corporations; and environmental regulation. *Prerequisite: 98.331 or consent of the instructor*

98.450 Legal Environment of Business (3) — Advanced coverage of topics in government regulation of business through administrative law, legislation, and judicial intervention. May include issues in the law of corporate securities, antitrust, environmental regulations, and other aspects of legal regulation of the competitive process. *Prerequisites: 98.331 and Economics 40.212*

98.460 Employment Discrimination and Affirmative Action (3) — A survey of major federal laws that address equal opportunity in employment and focuses on types of job discrimination outlawed by Title VII of the 1964 Civil Rights Act. Legal and ethical issues relating to affirmative action programs are discussed, as are state and local laws addressing employment discrimination.

Department of Geography and Earth Science

Faculty

- James R. Lauffer, Chairperson, Professor — B.S., Allegheny College; M.S., University of Hawaii; Ph.D., University of Delaware
- Brian A. Johnson, Professor — B.S., M.Ed., Indiana University of Pennsylvania; D.Ed., The Pennsylvania State University
- Sandra Kehoe-Forutan, Assistant Professor — B.A., Queen's University; MCRP, The Ohio State University; Ph.D., The University of Queensland
- James T. Lorelli, Professor — A.B., State University of New York at Binghamton; M.A., Syracuse University; Ph.D., Southern Illinois University
- Joseph R. Pifer, Associate Professor — B.S., Clarion State College; M.A., Arizona State University
- Karen M. Trifonoff, Assistant Professor — B.S., M.S., University of Akron, Ph.D., University of Kansas

Degree Program

Bachelor of Arts in Geography
A total of 30 to 60 semester hours is required for a major in geography.

Goals and Objectives

The programs in Urban/Regional Planning and Environmental Planning are aimed at providing majors with a broad based background in the planning field that will qualify them to obtain entry-level positions in the public and private sectors or prepare them for entry into graduate programs in planning. These programs include the incorporation of interdisciplinary courses that are vital to this broad based preparation. In addition the academic program plays a major role in preparing the students for a required internship that provides practical experience in dealing with diverse planning activities. This internship further enhances the employment potential of the graduate.

Option I

Requires Geography 41.101 and 41.102 plus 24 additional semester hours in geography courses.

Option II - Emphasis on Urban and Regional Planning

Requires 21 semester hours in planning including: Geography 41.250, 41.350, 41.497, and 41.498; 15 semester hours from 41.101, 41.221, 41.258, 41.302, 41.310, 41.315, 41.363, and Earth Science/Geology 51.105; 16 semester hours from 41.242, 41.264, 41.342 or Earth Science/Geology 51.320; 12 semester hours from Interdisciplinary Studies 09.231, Speech Communication 25.103, Mathematics 53.141 and Computer Science 56.110; Political Science 44.101 and 44.452 (for 6 semester hours); 3 semester hours from Economics 40.211, 40.212, 40.316, and 40.410; and 3 semester hours from Sociology 45.211, 45.213, 45.316, 45.457, and 45.468.

Option III - Emphasis on Environmental Planning

Requires 33 semester hours in planning including: 41.105, 41.250, 41.258, 41.301, 41.302, 41.350, 41.497, 41.498; 9 semester hours from 41.303, 41.315, Earth Science/Geology 51.105 and 51.370; 6 semester hours from 41.242, 41.264, 41.342 or 51.320; 18 semester hours from Interdisciplinary Studies 09.231, Speech Communication 25.103, Political Science 44.120, 44.452, Mathematics 53.141, and Computer Science 56.110.

Minor in Geography

The minor in geography constitutes 18 semester hours and must include the following courses 41.105, 41.250, 41.258, 41.301, and 41.302; and 3 semester hours from 44.315, 41.242 or 41.264.

Geography (Code 41)

41.101 World Physical Geography (3) — Studies Earth-sun relationships, land masses, oceans, landforms, weather and climate, and natural resources as elements and controls related to the adjustments humans make to their environment.

41.102 World Cultural Geography (3) — Demonstrates the relationship of humankind, land, culture, and economic activities.

41.105 Environmental Issues and Choices (3) — Examines contemporary environmental resource issues within a values, ethics, and decision-making framework.

41.125 Weather and Climate (3) — Studies the

interrelationships between the elements of weather and climate; elaborates on the functional application of these elements through a study of climatic realms.

41.200 Geography of United States and Canada (3) — Presents a spatial analysis of the United States and Canada emphasizing such concepts as environmental perception and sequent occupancy; considers salient problems within geographic regions in terms of genesis and potential for solution.

41.201 Geography of Europe (3) — Studies Europe's physical characteristics, topography, transportation systems, resources, populations, and trade.

41.202 Geography of Latin America (3) — Examines Latin America as a major geographic region in terms of those economic, racial, and cultural forms that have provided regional unity and diversity.

41.221 Economic Geography (3) — Reviews major economic activities; focuses on significant characteristics, location theory, and spatial patterns.

41.242 Map Skills (3) — Uses a variety of published maps for interpreting and interrelating past and present physical and cultural phenomena with a view toward the future.

41.250 Elements of Planning (3) — Acquaints students with the philosophy of planning, the roles of the planner, and planning objectives.

41.256 Climatology (3) — Analyzes climate (temperature, moisture, pressure, wind, air masses, and storms) and the worldwide distribution of climates.

41.258 Environmental Conservation (3) — Identifies resource management and environmental problems and offers possible alternative solutions for these problems.

41.264 Applied Cartography (4) — Studies fundamental principles, use of graphic media, methods of construction, use and interpretation of maps, models, charts, and diagrams, utilized in geography and in urban and regional planning.

41.281-289 Special Topics in Geography (3) — Presents areas of geographic interest to a general audience.

41.301 Water Resources Management (3) — An examination of contemporary water resource issues related to environmental planning and management.

41.302 Land Resources Management (3) — An examination of selected land-related issues and

problems with the objective of identifying appropriate management techniques.

41.303 Biogeography and Soil Resources (4) — Examines biogeographical and edaphic phenomena and the ways in which humans have modified vegetative communities and soil cover; characteristics of soil and processes involved in their formation, and significance of soils to mankind. Emphasizes sound biotic and soil resource management strategies.

41.310 Population Geography (3) — Analyzes physical, human, and economic factors that influence the changing pattern of the political map of the world.

41.315 Outdoor Recreation Resources Management (3) — Explores the array of contemporary issues involving land, leisure, and recreational planning.

41.342 Geographic Information Systems (3) — Presents an introduction to computer-assisted analysis of geographic data. Emphasizes GIS applications in management of natural resources, environmental assessment, and urban and regional planning. Laboratory projects provide opportunities to develop computer expertise. *Prerequisite: 41.242 or 41.264 or consent of instructor*

41.350 Advanced Planning (3) — Presents the development of skills and techniques used in analysis, plan preparation, goal setting, and implementation of urban and regional planning processes and activities. *Prerequisite: 41.250 or consent of instructor*

41.363 Urban Geography (3) — Provides a conceptual and methodological framework in which to view the process of urbanization.

41.475 Independent Study in Geography (1-3) — Provides independent, investigative research oriented to studies of specific geographical problems. *Prerequisite: Open to Juniors and Seniors majoring in geography.*

41.497 Internship in Planning (12) — Involves the placement of a student who is enrolled in the course of study in urban/regional planning or environmental planning into a planning office for one semester, during which time the student is actively involved in the functions and activities of that planning office.

41.498 Applied Planning Seminar (3) — Provides an opportunity for reporting and analyzing experiences in internship. Integrates and utilizes practice in the development of land use from an urban or environmental perspective. *Taken in coordination with the internship in urban/regional planning (41.497).*

Department of Health, Physical Education and Athletics

Faculty

- Jerry K. Medlock, Chairperson, Professor — A.B., Samford University; M.A., Ed.D., University of Alabama
- Ellen J. Blamick, Instructor — B.S., California University; M.S., West Virginia University
- Tamra Cash, Assistant Professor — B.S., Elon College; M.S. University of Tennessee; M.S., Eastern Kentucky University
- Charles W. Chronister, Associate Professor — B.S., M.Ed., East Stroudsburg State College
- Mary T. Gardner, Assistant Professor — B.S., M.Ed., East Stroudsburg State College
- Joseph B. Hazzard, Jr., Assistant Professor — B.S., Salem College; M.S., Shippensburg University
- Susan J. Hibbs, Associate Professor — B.S., Western Kentucky University; M.Ed., East Stroudsburg State College; Ed.D., Temple University
- Carl M. Hinkle, Assistant Professor — B.S., Montana State University; M.S., Ithaca College
- Roch A. King, Instructor — B.A., California State University at Fresno; M.S., Temple University
- Linda M. LeMura, Professor — B.S., Niagara University; M.S., Ph.D., Syracuse University
- Sheila A. Martucci, Instructor — B.A., William Paterson College
- Thomas F. Martucci, Instructor — B.S., Trenton State College; M.A., University of North Carolina
- Swapan Mookerjee, Assistant Professor — B.P.E., M.P.E., Lakshmbaj National College of Physical Education, Gwalior, India; Ph.D., University of Wisconsin, Madison
- Sharon L. O'Keefe, Instructor — B.S., Trenton State College; M.Ed., East Stroudsburg State College
- Ronald E. Puhl, Associate Professor — B.S., Lock Haven State College; M.S., West Chester State College
- Burton T. Reese, Associate Professor — B.A., M.Ed., East Stroudsburg State College
- David R. Rider, Assistant Professor — B.A., The University of Chicago; M.S., Indiana University of Pennsylvania

Roger B. Sanders, Professor — B.S., West Chester State College; M.A., Ball State University

Leon Szmedra, Associate Professor — B.S., State University of New York at Brockport; M.A., University of Northern Colorado; Ph.D., Syracuse University

Henry C. Turberville Jr., Associate Professor — B.S., M.A., University of Alabama

Degree Program

Bachelor of Science in Adult Health
A minimum of 44 semester hours are required for a major in adult health.

Goals and Objectives

The Department of Health, Physical Education, and Athletics serves the student community by providing academic credit to fulfill the university's General Education requirements. Credit is granted for participation in physical activities courses designed to be of lifelong benefit to the individual in the areas of fitness and recreation.

An interdisciplinary bachelor's degree program is available in adult health; an area of concentration is provided in elementary education. The graduate program in Exercise Science and Adult Fitness has its home in this department. The department cooperates in several career concentrations including community recreation leader and outdoor leadership and program administration.

Students over 29 years of age must have medical clearance before participating in vigorous physical activity courses.

Required Courses

Required interdisciplinary courses are: Psychology 48.101; Sociology 45.211; Biology 50.173, 50.174, 50.205 and 50.231; Philosophy 28.290 or 28.292 or Biology 50.254; Health 05.298; Interdisciplinary Studies 09.230; 05.321, 05.411, 05.476, 05.477; and Management 93.344 or Accounting 91.498.

Select one course from Health 05.250, 05.305, or 05.350

Select one course from Psychology 48.253, 48.311, 48.380 or 48.476

Select one course from Health 05.430, Philosophy 28.290 or Biology 50.254
Internship: 59.498-Natural Science and Mathematics.

Students are required to complete a minor or area concentration.

Health, Physical Education and Athletics (Code 05)

05.149 Aquatics (1) — Provides an opportunity for nonswimmers to make a proper physical and mental adjustment to water. Introduces basic skills as provided by the American Red Cross with specific emphasis on becoming safe in, on, or about a body of water.

05.150 Aquatics (1) — Contains same content as 05.149 but adapted for beginning skills.

05.151 Intermediate Aquatics (1) — Reviews basic aquatic skills; introduces advanced skills and swimming strokes with emphasis on form and efficiency, elementary rescue, and aquatic games.

05.155 Gymnastics (1) — Assists students to attain and maintain physical fitness through water activities.

05.200 CPR and Safety (1) — Designed for completion of Red Cross CPR certification and to develop a safety awareness expertise for accident prevention. *Fee may be required.*

05.214 Fencing (1) — Lecture aspect covers a study of the history of fencing, the weapons and equipment involved, rules of the sport, and safety procedures. Emphasis on learning and practicing the skills, and practice bouts; includes a tournament.

05.217 Bicycling (1) — An introductory course for novice cyclists who have access to a variable speed bicycle. Local touring is part of the course. Local bicycle rentals are available.

05.219 Tennis (1) — A beginning course that teaches basic stroke execution, strategy, and court etiquette.

05.221 Jazz Dance (1) — Develops fundamentals of jazz dance.

05.222 Creative Dance (1) — Develops the individual's capability for communication of thoughts, feelings and ideas through the medium of dance. Acquaints students with the basic elements of dance and guides them toward technique mastery with emphasis on expressive or creative movement.

05.224 Fitness Dance (1) — Attempts to provide a method of cardiovascular endurance in a particular interest area.

05.225 Beginning Ballet (1) — Develops the fundamentals of beginning ballet dancing. Elements, skills and the language of ballet will be introduced. This history and popularity of this art form along with the personal and creative benefits from ballet are included.

05.226 Jogging/Walking (1) — Explores the relationship of physical activity (jogging/walking) to the components of wellness and healthy lifestyles. Also provides sound exercise principles for successful, personalized fitness programs.

05.228 Gymnastics (1) — A co-ed introductory course that works primarily on floor exercise and includes instruction on a variety of apparatus including: the balance beam, pommel horse, parallel bars.

05.229 Water Polo (1) — Develops the skills, understanding and appreciation of water polo as recreational aquatic sport. Provides activity and instruction in individual fundamentals and their incorporation into a team concept. *Recommended for students with basic swimming ability.*

05.230 Weight Training and Fitness (1) — Develops knowledge and skill in and appreciation of weight training and conditioning programs.

05.231 Archery (1) — Course develops knowledge of, skill in, and appreciation of target archery as a recreational requirement.

05.232 Bowling (1) — Students learn the mechanics of bowling in this beginner's course that meets off-campus. Students begin with appropriate ball selection, learn acceptable styles, practice proper etiquette, and bowl under the instructor's close supervision. *Fee required.*

05.233 Badminton (1) — Deals with the strokes, strategies, and game of badminton from a beginner's viewpoint. Also valuable to the intermediate player.

05.234 Golf (1) — An introductory course that develops basic skills. Rules, techniques, etiquette, and an emphasis on skill practice are stressed. *Fee may be required.*

05.235 Riflery (1) — Develops the skills, safety, understanding, and appreciation of riflery as a recreational pursuit.

05.236 Volleyball (1) — Develops the skills,

understanding, and appreciation of volleyball as a recreational activity as well as a vigorous, competitive sport.

05.237 Modified Physical Education (1) — Independent and small group instruction for students who are unable to take part in other activities due to physical handicaps. *Not offered on a regular basis.*

05.238 Racquetball-Handball (1) — An introductory course that teaches history, etiquette, strokes, serves, and strategy in singles and doubles.

05.239 Square Dancing (1) — Develops skill in square and folk dances. Covers the sociological, physiological, and psychological values of square dancing. Students acquire a repertoire of western square dance moves and dance techniques.

05.240 Slimnastics and Fitness (1) — Develops an awareness and understanding of physical self and capabilities; teaches students how to improve their physical condition. Includes exercise and body mechanics.

05.241 Judo Self-Defense (1) — Provides a better understanding of the sport and a competency of judo and self-defense techniques. *Should be used as an elective within the physical education service program requirements.*

05.242 Physiological and Medical Aspects of Athletic Coaching (3) — Presents basic anatomical and physiological factors affecting movement, endurance, strength, and conditioning in sports; studies equipment, training, treatment of injuries, safety problems, and medical research relating to athletics.

05.243 Backpacking (1) — Reviews backpacking equipment and first aid procedures; includes how to select trails, menus, and cooking methods; teaches safety procedures; discusses how to adjust to the seasons, and how to protect the environment.

05.244 Orienteering (1) — Practical application of the knowledge and skills needed to satisfactorily follow a designated course through the wilderness with use of a watch, a compass, and a map.

05.245 Canoeing (1) — Offers instruction in the basics of canoeing, including skills that can be used recreationally in one's lifetime. Lake and river canoeing will be taught and experienced.

05.246 Beginning Skin and Scuba Diving (1)

— Provides basic instruction in the use of snorkel, mask, fins, and scuba units and an understanding of the physics of diving with a great emphasis on safety.

05.247 Rock Climbing (1) — Provides rock climbing experiences for the beginning rock climbing enthusiast. Introduces basic knowledge, skills, and practical application of climbing. Serves as a foundation for further experiences in this area of recreation.

05.248 Basic Sailing (1) — A beginning course that includes terminology, maneuvering under normal and severe weather conditions, seamanship, boating, and safety. *Swimming ability required.*

05.249 Synchronized Swimming (1) — Provides background in fundamental skills, strokes, and movement progressions involved in developing a basic routine.

05.250 Lifeguarding (2) — Provides an opportunity to attain an American Red Cross Lifeguarding Certificate. *CPR required (prerequisite or concurrent).*

05.251 Techniques of Coaching and Officiating Baseball (3) — Classroom-laboratory provides an overview of baseball administration, organization, fundamental skills, drills, and techniques of umpiring.

05.252 Techniques of Coaching and Officiating Basketball (3) — Instruction in techniques of coaching, player-coach relationship, team strategy, program organization, and officiating.

05.253 Techniques of Coaching and Officiating Football (3) — Instruction in techniques of coaching, player-coach relationship, program organization and administration, and officiating.

05.254 Techniques of Coaching and Officiating Field Hockey (3) — Instruction in techniques of coaching and officiating all the phases of field hockey.

05.256 Techniques of Coaching and Officiating Cross Country, Track and Field (3) — Analysis of technique and the development of personal skills. Knowledge provided for development of a track program. Discusses rules, starting, officiating, scoring, and facility use.

05.257 Techniques of Coaching and Officiating Wrestling (3) — Gives prospective coaches an insight into problems and situations that may be encountered; prepares the individual to teach as well as coach wrestling.

05.260 Techniques of Coaching and Officiating Swimming (3) — Presents techniques of coaching, swimming, diving; covers rule interpretations and duties of officials.

05.265 Basketball (1) — Provides activity and instruction in the development of individual offensive and defensive fundamentals and their incorporation into a team concept. Reviews basic strategy and current trends at all competition levels.

05.270 Exercise and You (2) — Studies appropriate physiological functions, exercise physiology, mechanical implications, and fitness measurement. Reviews procedures and practical application through programmed exercise. (*3 contact hours*)

05.271 Intermediate Archery (1) — Provides the opportunity for the student to develop shooting skills.

05.272 Intermediate Bowling (1) — Attempts to develop advanced skill and knowledge of bowling. *Fee required.*

05.273 Intermediate Golf (1) — Provides instruction in the techniques and strategy involved in improving the individual skills of the student. *Fee may be required.*

05.274 Intermediate Tennis (1) — Focuses on improving tennis skills.

05.275 Intermediate Volleyball (1) — Studies the development and history of volleyball. Attempts to improve fundamental skills, team play, and strategy through participation.

05.276 Intermediate Judo (1) — Provides an opportunity to develop higher levels of skill competencies in judo.

05.277 Advanced Sailing (1) — Intended for students who have sailing experience. Includes maneuvering, race tactics, sail tune, severe weather conditions, docking, and anchoring. *Prerequisites: Sailing and swimming ability*

05.290 Special Topics (1-3) — Topics announced in the scheduling bulletin prior to each semester.

05.298 Fitness and Wellness (3) — Provides learners with the tools for lifelong healthful living. Personal health profiles, mental health, personal fitness programs, stress management, nutritional, and environmental health topics are explored. *Successful completion of course fulfills one credit of the physical education requirement.*

05.305 Aquatic Fitness Programming (2) — Develops fitness management leadership skills

in an aquatic setting; covers physiological principles of exercise applied to swimming, and other water activities. *No prior swimming experience necessary.*

05.306 Psychology of Sport (3) — Aims to familiarize the student with psychological components of human performance related to sport and exercise. Focuses on sport participation and includes psychological assessment, intervention techniques and a brief introduction to the predominant research methods used in sport psychology. Course has particular value to coaches, teachers, psychologists and exercise specialists and other sport-affiliated professions.

05.308 Exercise and Mental Health (3) — Provides a strong base of knowledge of theory, research and practice in exercise and mental health. Also provides prospective fitness and exercise professionals (adult health majors) with essential information and suggestions of practical value in leadership roles in exercise, wellness, health promotion, corporate fitness, cardiac rehabilitation, commercial fitness and other areas.

05.309 Decisions for Healthy Behavior (3) — Survey of a variety of health topics including human sexuality, mental health, substance abuse, fitness, nutrition, cancer, death, and dying.

05.311 Methods, Materials in Elementary School Physical Education (3) — Provides principles and procedures to meet the needs and interests of elementary-age children in the area of physical education.

05.320 Health and Safety in the Elementary School (3) — Covers health knowledge, training, and health appraisal techniques for teaching elementary school health; the elementary school health program; and safety education in the elementary school.

05.321 First Aid Safety (3) — Provides training in first aid and safety. Red Cross standard, advanced, and cardiopulmonary resuscitation certifications may be earned.

05.330 Introduction to Coaching (3) — An overview of basic theories and coaching applications in sport philosophy, sport psychology, sport pedagogy, first aid and sport management resulting in American Coaching Effectiveness Program Certificate.

05.331 Recreation Education (3) — Presents discussion of, and practice in, recreation ac-

tivities used in school and playground situations. Emphasizes techniques of leadership, recreation planning, legal liability, and trends in recreation programming.

05.333 School Camping and Outdoor Education (3) — Acquaints students with the scope of organized camping and the acquisition of and practices in the basic skills required of individuals involved in camping and outdoor education training. *Requires field experiences*

05.350 Water Safety Instructor (2) — Reviews the nine basic swimming strokes and advanced lifesaving skills; provides opportunity to analyze stroke mechanics, teaching methods, and provisions. An American Red Cross Water Safety Instructor Certificate is awarded after satisfactory completion. *Prerequisites: A valid American Red Cross Advanced Lifesaving Certificate; 17 years old prior to start of course, sound physical condition, and a Red Cross Swimmer's Certificate or ability to perform swimmer course skills*

05.354 Women in Sport (3) — Surveys aspects of the historical and contemporary role of women in sport. Encourages an awareness in students regarding the differences between sport for men and women in various contexts, including social, psychological and biophysical. By examining the past and current practices and cultural norms in light of evolving research findings, students are expected to increase their understanding of issues germane to sport.

05.370 Measurement and Evaluation in Human Performance (3) — Acquaints future adult health majors with techniques of evaluating and measuring the progress of physical fitness

and exercise testing components. Includes descriptive statistics, knowledge tests, grading, physical performance tests and tests of sport skills. *Prerequisite: 53.114 College Algebra or consent of the instructor*

05.397 Adult Health Development Program (3) — An intergenerational and multicultural health program that trains students to work one-on-one with older adults to promote health and well-being.

05.411 Adapted Physical Education (3) — Reviews the study and practice in techniques used by teachers to recognize and meet problems of persons with special needs.

05.420 Techniques in Health and Physical Education for Special Education Teachers (3) — Presents principles and procedures for meeting physical, emotional, and social needs of the mentally disabled.

05.430 Current Issues in Health Education (3) — Assesses major problems which concern communities today: drugs, sexually transmitted diseases, pollution, alcohol, and suicide.

05.476 Exercise Physiology (4) — Study of adult physiological functions under stress and the adjustment and regulatory activities of the body during exercise; development of a working knowledge of assessments, motor characteristics, and physical performance.

05.477 Methods and Materials in Adult Physical Education (3) — Emphasizes the academic and technical knowledge necessary to conduct health and fitness programs in public and private agencies. Students are prepared to assume leadership and management positions within the health and fitness industries.

Health Services

Program Coordinator

James E. Cole, professor, Department of Biological and Allied Health Sciences

Degree Program

Associate of Science in Health Services

Goals and Objectives

The programs in allied health sciences encompass those health areas in which individuals support, aid and increase the efficiency and effectiveness of other health professionals by becoming a contributing member of a health care team. Programs in this area combine natural science and liberal arts education with clinical instruction. In general, students who complete any of the programs may enter their professions immediately. Others may select post-graduate education in health care. Central to most allied health programs, especially the clinical portion, is satisfactory completion of the clinical standards, often referred to as the Essentials. These standards establish requirements related to curriculum, personnel, financing, resources, and records.

Program of Study

This advanced entry degree program is available to health workers who have obtained a clinical education from an accredited health agency and who desire additional education in communicative and interpersonal skills. Its initiation was encouraged by the fact that many certified health workers are now being strongly encouraged to continue their education in a collegiate setting. The role of the health worker has expanded to include greater responsibility in the hospital and nursing home setting as well as a more substantial commitment to improving community health. The program

attracts medical laboratory technicians, licensed practical nurses, histologic technicians, and laboratory assistants, i.e., those workers who have satisfactorily completed the equivalent of one year's clinical education.

Most students in the program take courses on a part-time basis and require more than two years to complete the curriculum.

Candidates for the associate degree must have satisfactorily completed 22 semester hours of coursework, maintained a minimum QPA of 2.0, and have proof of satisfactory completion of a clinical program. Awarding of this associate degree is contingent upon the student being accepted for candidacy and completion of the program while maintaining good academic standing. Transfer credits from accredited institutions are accepted, but at least 15 semester hours must be taken at Bloomsburg University.

Required Courses

The following courses are required: English 20.101 and 20.201; Biological and Allied Health Sciences (for non-biology majors) 50.107, 50.173, 50.174, 50.205, 50.240, 50.282 (Special Topics: Health Care Leadership) or Management 93.346 or 93.445; Chemistry 52.101, 52.103; one course from Mathematics 53.101, 53.111, 53.113, 53.114, 53.118, 53.123, 53.141; Psychology 48.101, 48.210 or 48.211, 48.251, 48.311; Sociology 45.211; and Speech Communication 25.103; Computer Science 56.110.

Professional Clinical Courses

Proof of certification or licensure as a health worker—12 semester hours for this certification.

Department of History

Faculty

- James R. Sperry, Chairperson, Professor — B.A., Bridgewater College; M.A., Ph.D., University of Arizona
- Richard G. Anderson, Associate Professor — B.A., Western Kentucky State College; M.A., Ph.D., Texas Christian University
- Nancy Gentile-Ford, Assistant Professor — B.A., M.A., Ph.D., Temple University
- Michael C. Hickey, Assistant Professor — B.A., M.A., Ph.D., Northern Illinois University
- Walter Howard, Associate Professor — B.A., M.A., University of West Florida; Ph.D., Florida State University
- William V. Hudon, Professor — B.A., Fordham University; M.A., Ph.D., University of Chicago
- Jeanette Keith, Associate Professor — B.A., Tennessee Technological University; Ph.D., Vanderbilt University
- Arthur W. Lysiak, Associate Professor — B.S., M.A., Ph.D., Loyola University
- H. Benjamin Powell, Professor — A.B., Drew University; M.A., Ph.D., Lehigh University
- Theodore M. Shanoski, Professor — B.S., East Stroudsburg State College; M.A., Ohio University; Ed.D., Temple University
- Ralph Smiley, Professor — B.A., Brooklyn College; M.A., Ph.D., Rutgers University
- George A. Turner, Professor — B.S., M.S., Eastern Illinois University

Degree Program

Bachelor of Arts in History

A total of 36 semester hours is required for a major in history with at least 15 semester hours drawn from 300 and 400 level courses.

Goals and Objectives

The History Department fosters both broad based and specific objectives. Achievement of these goals enhances the university's academic climate and the department's professional effectiveness. The degree program prepares majors for the practical skills needed for employment as well as the knowledge and cultural understanding that is the mark of an informed citizen in a democratic society. The program also prepares students for graduate

work and professional training, especially in the field of law.

Introductory history courses provide the basic factual information which places national and international events in their proper setting. Advanced courses develop interpretive and analytical abilities as well as those oral and written skills applied to historical inquiry and the day-to-day problem-solving situations confronted by the educated student. The ability to complete research and work independently on specialized research projects and the maturity associated with independent inquiry are essential ingredients of advanced study. Current political and social issues are handled within a flexible academic program which features traditional topical and/or time periods as well as issue-oriented courses which deal with current events. Diverse course offerings allow students the opportunity to study nations whose culture, values, and political goals differ from their own. The examination of earlier cultures, time periods, and emerging nations allow the student to place the evolution of civilization in a proper historical context.

Lastly, history is among the humanities. Like a great painting, a piece of music or a gorgeous sunset, history is viewed as something that enriches one's life and has an existence separate from the practical skills and professional preparation associated with the discipline.

Required Courses

Six history courses are required for the major: 42.112, 42.113, 42.121, 42.122, 42.133 and 42.398. It is strongly recommended that student take 42.398 Research and Writing Skills in their junior year.

One course, 3 semester hours, is selected from the following regional history courses: 42.141, 42.142, 42.143 and 44.144.

Any course, 3 semester hours, is selected from an upper division (300-400 level) course in American history.

Any course, 3 semester hours, is selected from an upper division course (300-400 level) course in Western civilization or European history covering the period through 1815.

Any course, 3 semester hours, is selected from an upper division (300-400 level) course in European history covering the period since 1789.

Electives in history: any two 300 or 400 level history courses.

Minor in History

This program requires 18 semester hours of history courses with at least 6 semester hours in 300 or 400 level courses. The minor includes: 6 semester hours, any two 100 level history courses; 6 semester hours, any two 200 or 300 level history courses; 3 semester hours, any of the 300 or 400 level history courses; and 42.398 Research and Writing Skills.

The program for the history minor provides the following features: at least one directed exercise in independent historical research (42.398); a minimal background in those courses at the 100 level that are basic to and required of history majors; flexibility in framing a minor pertinent to the student's academic interest; and at least one course in addition to 42.398 at an advanced requirement level.

History (Code 42)

Prerequisites are subject to modification by the instructor.

42.100 Transatlantic World in the 20th Century (3) — Represents an analysis comparing and contrasting the experiences of Americans and Western Europeans in the 20th century. Focuses on the decay of Western traditions, the dilemma of the individual in an increasingly complex society, and the rise of "technocratic" civilization. Provides insight into roots of current events, promotes sense of historic awareness beyond the national level, and enhances appreciation of basic similarities and differences among Americans and Western Europeans.

42.112 Origins of the Modern World (3) — Describes the political, economic, social, intellectual military forces, and events that shaped the story of mankind from the early Renaissance to the early 19th century.

42.113 The Modern World (3) — Reviews the political, economic, social, intellectual, and technological elements of 19th and 20th century history, showing the progress of the Western tradition and the growing importance of the non-Western world.

42.121 United States History Survey: Colonial Period to 1877 (3) — Presents a chronological history to 1877 with emphasis on foreign

affairs and the evolution of political, economic, social, and cultural aspects.

42.122 United States History Survey: 1877 to the Present (3) — Presents political, social, cultural, intellectual, economic, and foreign affairs developments of the United States from Reconstruction to the present.

42.133 The Ancient and Medieval Worlds (3) — Surveys from the Ancient Near East to the fall of the Roman Empire in the West, emphasizing Greece, Rome, and the rise of Christianity; a study of the people and countries of the West that emerged after the fall of the Roman Empire, with emphasis on feudalism, manorialism, and the medieval church. *Not offered every semester*

42.141 **The Modern Far East (3) — Focuses on modern China and Japan and closely studies the value system of these peoples as reflected in their politics, arts, and communications in the 19th and 20th centuries. Particular attention paid to the interaction between the old models provided by Confucianism and Buddhism with the models provided by the West during modernization. *Not offered every semester*

42.142 **Latin America: From European Colonization to the Present (3) — A concise introductory survey of Latin American history from 1492 to the present, stressing the significant economic and social factors in its evolution. *Not offered every semester*

42.143 **Black Africa (3) — Presents a survey of the transformation of the societies of Sub-Saharan Africa from colonialism to national independence.

42.144 Islamic and Hindu Worlds: Middle East, India, and Malaysia (3) — Introductory course surveying the religious, cultural, economic, and political history of the Middle East, North Africa, the Indian subcontinent, the Malay Archipelago, and their bearing on contemporary Third World problems. Not offered every semester.

42.208 Contemporary Issues in U.S. History (3) — Examines selected issues of social, political, or foreign affairs within a historical context, describing the origin, evolution, current significance, and importance in American society. *The issues may vary each semester*

42.210 **Values in Conflict in 20th Century History (3) — Presents select American conflicts in the 1960s involving values of the individual and the civilization; resolutions achieved

are reviewed and evaluated. *The selection of conflicts varies each semester*

42.215 Global Issues in History: A Conflict of Values (3) — Introduces the historical and global nature of many of today's critical issues that have far reaching consequences. Population explosion, famine in the underdeveloped world, energy crisis, terrorism, and the spread of nuclear weapons are illustrative of some of the issues that will be examined. Attention will be given to defining values as related to these issues.

42.222 Business History of the United States (3) — Focuses on the evolution of business from 1600 to the present, entrepreneurial leadership of major businessmen and the history of major modern industries.

42.223 Economic History of the United States (3) — Focuses on the changing nature of the American economy, this course covers three time periods: the commercial-agricultural age, the industrial age, and the modern managerial age. Examines agriculture, banking, business administration, commerce, labor, manufacturing, mining and transportation, social and political factors that contributed to changing economic relationships in the United States.

42.224 **The Immigrant Experience (3) — Provides an overview of cultural diversity in American society by focusing on the history of immigration from the colonial period to the present. Students examine ethnicity in America through the study of political, economic, religious and social issues; industrialization and urbanization; attitudes of nativism, discrimination and racism; and powerful influences of immigrant kinship networks, ethnic community associations, cultural traditions, religious institutions and ethnic group identity. Lectures include new historical interpretations of cross-cultural relationships and new assimilation theories. *Not offered every semester*.

42.226 Popular Culture in America (3) — Review of major forms of popular culture in America from colonial beginnings to the present, telescoped to permit fullest presentation of the period since 1920. Course blends continuity of values and ideas in American culture with dynamics of change to which the culture constantly adjusts. *Not offered every semester*

42.228 **African-American History (3) — Examines the nature and meaning of the African-American experience in the United States surveyed from its beginnings to the present.

Reviews black creative expressions in the visual arts, music, literature, philosophic thought, and social history.

42.229 Modern World Leaders (3) — Studies significant world leaders in religion, politics, war, and culture and their impact on world history. Focuses on different leaders each time offered and covers a selected period from the Renaissance to the present. Analyzes the conditions which helped produce these leaders and ends by discussing reasons for their success or failure. Includes only leaders who have made a significant contribution outside their national boundaries.

42.250 History of Science (3) — Studies historical development of the sciences and the nature of scientific thought and method; provides insight and understanding of the characteristics of the sciences as well as their significance to human progress from antiquity to the present. *Not offered every semester*

42.255 Health Issues and Health Professionals in History (3) — Delineates major issues and personalities in rise of modern health care as well as ideas and attitudes prevalent in the histories of health professions. Compares and contrasts American, Western European, and Canadian health services. Explains relevance of cultural values for the theory and organization of health care. *Not offered every semester*

42.260 Sport and Society in America (3) — Presents a cultural approach to organized sport in the United States; proceeds from the premise that sport mirrors the values, states of technology, and the conditions of society. Emphasizes the rise of the institution of sport and its impact on business, commercialism, leisure, affluence, urbanism, nationalism, and the problems of governance and law. *Not offered every semester*

42.281 Military History I (3) — Studies organized warfare from its origins to the last campaign of Napoleon I, concentrating on strategy and tactics. Examines moral and social problems raised by warfare. *Not offered every semester*

42.282 Military History II (3) — Studies organized warfare and the theory of war from the Napoleonic age to the present, concentrating on strategy and tactics. Examines the socio-political background, especially of the two world wars and the age of guerrilla warfare. *Not offered every semester*

42.315 Origins of Civilization: The Ancient Near East (3) — Surveys known origins of civ-

lization in the Neolithic, Bronze and Iron ages in Mesopotamia, Egypt, Anatolia and Syria-Palestine, with some attention to India and China. Not offered every semester. *Prerequisite: 42.133, or consent of the instructor*

42.316 The Classical World: Ancient Greece and Rome (3) — Covers ancient Greek and Roman history and culture. Greece: emphasis on Aegean civilizations, the age of Pericles and the Hellenistic age after Alexander the Great. Rome: emphasis on early monarchy and republic, imperial expansion, the Pax Romana, and the decline and fall of the empire; concluding with the Barbarian age and the rise of Byzantium. *Not offered every semester. Prerequisite: 42.133, or consent of the instructor*

42.318 Early England: The Making of an Island State (3) — Reviews political, economic, social, and cultural life in England to the Glorious Revolution. *Not offered every semester*

42.319 Modern England: The First Industrial Empire (3) — Examines political, social, economic, and cultural development in England from the Glorious Revolution to the present with emphasis on the development of democracy, the Industrial Revolution, and the growth and decline of the British Empire. *Not offered every semester*

42.320 French Revolution and Napoleon (3) — Analyzes 1789-1815 era in France and assesses its significance for the history of France and the world. Not offered every semester. *Prerequisite: 42.112 or consent of the instructor*

42.324 Revolutionary Europe and the Rise of Modern Traditions, 1600-1789 (3) — Discusses the rise of the modern state; the political, intellectual, social, economic, and cultural aspects of the eras of the Scientific Revolution and Enlightenment; the establishment of European world hegemony and a world economy; the diplomatic and military interaction of the European states. Not offered every semester.

42.326 Europe 1789-1914 (3) — Studies political and military events within their economic, social, intellectual, religious, and artistic settings from the French Revolution through the Industrial Revolution. Examines the unification of Italy and Germany to the diplomatic crises that led to the first world war. Not offered every semester.

42.327 World War I and the Dictators (3) — Examines origins of World War I and alliance systems that fought it, diplomacy and military

strategy and tactics of the war and the peace treaties of 1918-1920. The rise of Mussolini, Stalin, Hitler, and the lesser dictators along with the international crises that finally culminated in the outbreak of World War II. Course stresses ideological and global patterns of which European events formed a part. *Not offered every semester*

42.328 World War II and Its Aftermath (3) — Surveys European powers in the late 1930s with emphasis on the forces leading to war; military and diplomatic developments of World War II and the causes of the East-West rift; the reconstruction of democratic Europe and formation of the Soviet bloc; European integration and political trends in both power systems. *Not offered every semester*

42.329 **The American Woman (3) — Studies the history of women in America from colonial times to the present; topics include women's work, family life, politics, sexuality, education, feminism and reactions against it, and the many facets of women's public and private roles in the nation's history.

42.335 History of Christianity (3) — Promotes student analysis of the ancient, medieval and modern roots of contemporary Christian denominations and movements. Primary and secondary historical sources are discussed seminar-style in order to critically examine important ideas, personalities and historical conditions of Christianity. *Prerequisite: Any course in history or consent of the instructor*

42.336 Medieval Europe (3) — An analysis of European history from 300 to 1400, focusing on political, social, religious, and intellectual trends during the period. Feudalism, church history, and commercial relations receive particular emphasis. Examines the status of women in medieval society. *Prerequisite: 42.112*

42.337 Europe in the Renaissance and Reformation (3) — A detailed analysis of European history from 1300 to 1650, focusing upon the intellectual and artistic movement known as the Renaissance and the religious upheaval associated with the terms "Reformation" and "Counter-reformation." Political, social, intellectual, and religious trends are highlighted. *Prerequisite: 42.112*

42.346 Modern European Intellectual History (3) — Relates changes in currents of thought during the period to political, economic, and social developments. Special attention given to interpretations of major intellectual move-

ments. *Not offered every semester.*

42.347 History of the Holocaust (3) — Focuses upon the major theme—the genesis and implementation of the planned destruction of European Jewry from 1933 to 1945; briefly traces the history of anti-Semitism and evaluates scope of prejudice, discrimination, and genocide in contemporary civilization. Includes an analysis of literature of the Holocaust and evaluation of the Holocaust's impact on modern-day Israel and world Jewish community. *Not offered every semester*

42.356 Russia to 1917 (3) — Analysis of Russian political and social history from the ninth century to 1917, with emphasis on the 18th and 19th centuries. *Not offered every semester*

42.372 Colonial America and the War of Independence (3) — Reviews European colonization in North America with major attention to the establishment and development of England's colonies, an emerging American society, and problems which created conflict between the Americans and the British resulting in the American War of Independence. *Not offered every semester*

42.374 U.S. Social History (3) — Focuses on everyday life in the past and how ordinary people made history and were affected by historical change. Emphasis on family life, as a way of exploring issues of race, gender, and ethnicity. *Prerequisites: 42.121 and/or 42.122*

42.379 The New Nation: United States, 1781-1845 (3) — Reviews the impact of the democratic experiment on government, the economy, culture, and society. Among subjects studied are political parties, railroads, popular music, and anti-slavery. *Not offered every semester*

42.381 Civil War, Reconstruction and Industrialization: United States, 1845-1896 (3) — Surveys the causes of the Civil War, the war itself, reconstruction, and industrialization. Topics include politics, ideology, military technology and tactics, race and gender issues, the economy, labor, immigration, and popular culture. *Prerequisite: 42.121*

42.383 Shaping of Contemporary America, 1896-1941 (3) — Examines during these years-major changes: imperialistic adventures, reluctant but expectant involvement in World War I, the "flaming '20s," and the nation's greatest depression. Out of these emerges the modern mass-centered welfare state. *Not offered every semester.*

42.385 Recent American History: 1941 to the Present (3) — Examines the major political, economic, social-cultural, and intellectual developments in the United States from 1941 to the present. Cold War, Korea and Vietnam, turmoil of the 1960s, nuclear concerns, and the role of the individual in an increasingly complex, technological society are some of the major themes examined. *Not offered every semester*

42.388 Pennsylvania (3) — Examines major contributions of Pennsylvania to national life, relations between state and national movement. *Not offered every semester*

42.391 Diplomatic History of the United States to 1898 (3) — Presents a critical analysis of United States foreign relations from the Colonial Period to the 1898 war with Spain. *Not offered every semester*

42.392 Diplomatic History of the United States Since 1898 (3) — Presents a critical analysis of United States foreign relations from the war with Spain in 1898 to present. *Not offered every semester.*

42.395 **African-American Radicalism in the 20th Century (3) — Examines the major black radicals and their philosophies and movements in 20th Century America. Special emphasis will be placed on the following figures: W.E.B.DuBois, Marcus Garvey, Malcolm X, Stokely Carmichael (Kwame Toure), Angela Davis, Amiri Baraka, the Black Panther Party and Louis Farahkhan of the Nation of Islam.

42.397 Independent Study in History (1-4) — The topic selected must be approved by a committee appointed by the chairperson. Independent reading and/or research related to some aspect of history is supervised by an appropriate member of the department. A student may register for this course no more than twice, and credits may not exceed 4 semester hours. See the section on Independent Study. *Prerequisite: 60 semester hours*

42.398 Research and Writing Skills (3) — Focuses on the development of proficient research and writing skills. Students learn to fully utilize library and research facilities; develop skills in analyzing and interpreting original/primary research documents; and produce a clear, concise and well-written lengthy formal paper. In addition, students develop an understanding of how and why history is written and revised.

2.404 Topics in American History (3) — Seminar allows students to focus on a specific topic or related topics in American history for in-depth study and analysis. Includes historiography of the chosen topic, discuss problems associated with the topic and produce a research paper. Topics vary from semester to semester.

2.452 Soviet Russia (3) — Analysis of 20th century Russian and Soviet political and social history. *Not offered every semester.* Prerequisite: 2.113

2.453 Problems of Contemporary Latin America (3) — Analyzes recent events or movements that may indicate recurrence of historical problems or major developments of international significance in selected countries of Latin America. *Not offered every semester.* Prerequisite: 3 semester hours in history

42.460, 42.461 Topics in European History (3) — Investigates select topics in European history. Seminar-style course studies variety of problems in European history, in the medieval, early-modern, and modern periods. In-class discussion and analysis of secondary materials on the history, philosophy, politics, science and art of a chosen period. Seminar aims toward the production of a research paper in an area of the student's own choosing. *Topics vary from semester to semester.* Prerequisites: 42.112 or 42.133

42.469 **Women and Gender in European Intellectual History I (3) — Investigates the condition of women, of female views concerning that condition, and the view of males concerning women, over the course of western history.

Women and Gender I covers the ancient, medieval and early-modern periods (c.650 BC — 1650 AD). *Prerequisite: two 100-level courses in history or consent of the instructor*

42.470 **Women and Gender in European Intellectual History II (3) — Investigates the condition of women, of female views concerning that condition, and the view of males concerning women, over the course of western history. Women and Gender II covers the Scientific Revolution to the present (c.1550-1995). *Prerequisite: two 100-level courses in history or consent of the instructor.*

42.472 History of Labor in the United States (3) — Surveys the emergence and development of organized labor from the post-Civil War period to the present. A third of the course is an analysis of contemporary labor-management problems and labor's changing role in an increasingly technological society. *Prerequisite: 3 semester hours in history*

42.497 Internship in History (3-12) — Provides a work-study experience jointly administered by an academic faculty member and a sponsoring employer, with about 40 hours of supervised work generating each semester hour. *Prerequisite: For history majors, 15 semester hours of history including 42.398. Other majors may enroll with consent of advisers. Note: A student may not apply more than 3 semester hours of internship toward the fulfillment of the history major, although a student may enroll for more than 3 semester hours of 42.497*

**Indicates course approved as diversity-focused.

Interdisciplinary Studies

Interdisciplinary courses listed in this section are planned and often staffed by members of more than one department. The content of these courses subsequently spans two or more academic disciplines.

Broad Area Programs for Bachelor of Arts and Bachelor of Science

These programs offer opportunities for students to follow a less conventional curriculum according to their preferences. A student fulfills 54 semester hours of General Education requirements and then chooses to complete the prescribed core courses in the humanities, the social sciences, or the natural sciences and mathematics. He or she completes a total of 48 semester hours in the area of his or her core curriculum, with free electives sufficient to meet the 128 semester hour requirement for graduation. Students interested in the Broad Area Program should contact the program's adviser, Dr. Michael Poliakoff, in the College of Arts and Sciences.

The broad area interdisciplinary programs are currently under curriculum review. Contact Dr. Poliakoff for additional information.

Requirements for the Bachelor of Arts in the Humanities

20.302 Advanced Composition	(3)
20.363 Shakespeare	(3)
26.102 Introduction to Theater Arts	(3)
25.321 Argumentation	(3)
28.211 Introduction to Philosophy	(3)
28.212 Logic	(3)
Art history elective	(3)
Music history/literature/theory	(3)
History — choose two courses	(6)
Languages and Cultures option:	(3)

Choose from:

Intermediate foreign language course	(1)
Foreign literature course (in original or translation)	(1)
Foreign culture and civilization course	(1)

Total Core	(33)
Humanities electives	(15)
Total Broad Area Humanities Requirements	(48)

Requirements for the Bachelor of Arts in the Social Sciences

40.211 Principles of Economics I	(3)
40.212 Principles of Economics II	(3)
41.101 World Physical Geography	(3)
41.102 World Cultural Geography	(3)
44.101 Elements of Political Science	(3)
44.161 U.S. Government	(3)
45.211 Principles of Sociology	(3)
Sociology elective	(3)
46.101 Introduction to Anthropology	(3)
or 46.200 Principles of Cultural Anthropology	(3)
48.101 General Psychology	(3)
Psychology elective	(3)

Total Core	(33)
Social Sciences electives	(15)
Total Broad Area Social Sciences Requirements	(48)

Requirements for the Bachelor of Arts in Natural Sciences and Mathematics

53.125 and 53.126 Analysis I and II	(6)
Subject to the discretion of the Department of Mathematics and Computer Science and the adviser, student will take 53.113 Pre-Calculus before 53.125 Analysis I.	
53.175 Intro to Computer Science	(3)
54.211 and 54.212 General Physics I and II	(8)
Or 54.111 and 54.112 Introductory Physics I and II, subject to the discretion of the instructor and the adviser, considering that 54.211 and 54.212 General Physics I and II have as prerequisites (or concurrent registration) 53.125 and 53.126 Analysis I and II, respectively, and are requirements for certain advanced courses in physics and chemistry.	

50.110 Biology of Animals, General Zoology	(4)
50.120 Biology of Plants, General Botany	(4)
52.115 Fundamentals of Inorganic Chemistry	(4)
52.131 Fundamentals of Organic Chemistry	(4)
51.101 Physical Geology	(3)
51.111 Physical Geology Laboratory	(1)

1.102 Historical Geology	(3)
1.112 Historical Geology Laboratory	(1)
Total Core	38-41 semester hours
Approved electives to complete	(9-11)
Total Broad Area Natural Science and	(50)

Mathematics Requirements

Electives within the Broad Area requirements are to be chosen from a list compiled by the adviser for the program.

Harrisburg Internship Semester

During each semester of the academic year, Bloomsburg University selects an undergraduate student to participate in The Harrisburg Internship Semester Program (THIS), sponsored by the State System of Higher Education. Students selected are placed with policy makers in state government offices and agencies. Each THIS intern earns 15 semester hours: 9 semester hours for the internship program, 3 semester hours for a research project, and 3 semester hours for participating in an academic seminar.

To be eligible to apply, a student must have maintained a 3.0 QPA in at least 45 semester hours. THIS interns are selected from all majors. Contact the Cooperative Education and Academic Internships Office in Ben Franklin Hall for application information.

Interdisciplinary Studies (Code 09)

09.100 University Seminar (1) — Promotes a successful transition to college life for new freshmen through the presentation of critical information about the university's academic program.

09.111 Introduction to the Peoples of the Third World (3) — Examines the peoples of the Far and Middle East, Africa, and Latin America; their art, literature, philosophy, cultural geography, and history, sketching their importance in the world.

09.211 History of Natural Scientific Thought (3) — Reviews the historical development of the natural sciences and mathematics, the nature of scientific and mathematical thought and methods, characteristics of these disciplines and their significance to human progress.

09.213 Science, Technology, and Human Values (3) — Compares the interaction of science

and technology with human values. Studies past, present, and future technological developments and their impact on personal and social values.

09.230 Human Sexuality (3) — Presents an overview of the role of sexuality in the life of humans. Considers anthropological, biological, psychological, and sociological aspects of sexuality. Addresses values, ethics, and responsible decision making. Additional cost for field components and student projects. *Two hours lecture and one and one-half hours discussion per week*

09.231 Technical Writing (3) — Presents the principles of technical writing in the physical, natural, and social sciences and in technology and industry. Promotes effectiveness in communicating technical information to specialized and general audiences. Uses seminar approach involving class participation and individualized instruction.

09.311 Seminar in American Studies I (3) — Provides a thorough appreciation of our varied heritage and research materials and resources available for deepening the knowledge of this growing area of inquiry.

09.312 Seminar in American Studies II (3) — continuation of 09.311.

09.401 History and Policies of USSR (3) — Combines the study of the history of the USSR with the approaches of political science. Usually offered during summer session. Involves students in a tour of areas of the USSR.

09.431 Socialism: Theory and History (3) — Provides an historical and theoretical study of the socialist idea and its various attempted realizations from biblical times to present.

09.487 THIS Internship Experience (9) — Internship provides outstanding students with enriching academic experience as an intern in the executive or legislative branches of state government or with state boards, agencies, or commissions.

09.488 THIS Research Project (3) — The student intern completes an individualized directed project involving substantial analysis and research. The project is related to the internship experience.

09.489 THIS Academic Seminar (3) — Student interns participate in a seminar coordinated by the resident director. The seminar is structured to integrate the student's work experience with a rigorous academic component and

an exposure to multiple facets of state government.

09.491 Honors Independent Study in Humanities I (1-3) — An independent study course in which, under the guidance of a faculty mentor, the student completes the initial project(s) in the first stage of his/her proposed honors work.

09.492 Honors Seminar in the Humanities (3) — Allows for continued in-depth study of a particular research project of the student's choice and provides honor students the opportunity to discuss with peers and interested faculty concepts in the humanities related to the project and to the student's major field. Seminars organized around general themes selected by the humanities honors committee and announced in advance.

09.493 Honors Independent Study in the Humanities II (1-3) — Independent study in an area previously approved as part of the student's overall honors program.

09.495 Honors Seminar in the Natural Sciences and Mathematics (1) — Offers a cross-disciplinary perspective to students in the honors program with emphasis on student presentation and discussion of important topics in a student's area of expertise.

09.496 Honors Independent Study in the Social Sciences I (1-3) — Involves the student's selection of an honors adviser and project, initial exploratory reading, and a proposal for a major Honors Independent Study Project. Reserved for students who qualify for and wish

to pursue an honors course of study in their last two years. Usually taken in the junior year.

09.497 Honors Seminar in the Social Sciences (3) — Allows for continued in-depth study of a particular research project and provides honor students the opportunity to discuss with peers and interested faculty concepts in the social sciences which relate to the research project and the student's major field. Focus of the seminar is interdisciplinary.

09.498 Honors Independent Study in Sciences II (3) — Provides for an on-site work experience and training program designed to give selected interns an opportunity to apply theoretical and descriptive knowledge acquired in multiple humanities disciplines. Requires approval of the internship coordinator and the dean of Arts and Sciences.

47.498 Social Sciences Internship (1-9) — Provides for an on-site work experience and training program designed to give selected interns an opportunity to apply theoretical and descriptive knowledge acquired in multiple social sciences disciplines. Requires approval of the internship coordinator and the dean of Arts and Sciences.

59.498 Natural Sciences and Mathematics Internship (1-9) — Internship provides on-site work experience and training program to give selected intern an opportunity to apply the theoretical and descriptive knowledge acquired in multiple natural sciences and mathematics disciplines. Requires approval of the internship coordinator and the dean of Arts and Sciences.

Department of Languages and Cultures

Faculty

Brenda Keiser, Chairperson, associate professor; B.A., Kutztown State College; M.A., Middlebury College; Ph.D., University of Pennsylvania

Brigitte L. Callay, professor; B.A., M.A., University of Delaware; Ph.D., University of Louvain, Belgium

Patricia Dorame-Holoviak, associate professor; Lic. in Spanish Lit., University of Veracruz, Mexico; Ph.D., University of Texas at Austin

Gilbert Darbouze, associate professor; B.A., M.A., City College of New York; Ph.D., Graduate School and University Center-CUNY

Amarilis Hidalgo-DeJesus, assistant professor; B.A., University of Puerto Rico; M.A., Temple University; Ph.D., University of Colorado

Jing Luo, assistant professor; M.A., Beijing University, China; Ph.D., The Pennsylvania State University

Ramonita Marcano, instructor; B.A., M.A., Rutgers University

Luke Springman, assistant professor; B.A., Indiana University; M.A., Ph.D., Ohio State University

Jorge A. Topete, assistant professor; A.M., Ph.D., University of Pennsylvania

Degree Programs

Bachelor of Arts in French, Bachelor of Arts in German, Bachelor of Arts in Spanish

- A total of 36 semester hours is required for a major in French.
- A total of 36 semester hours is required for a major in German.
- A total of 36 semester hours is required for a major in Spanish.

Students should inquire in the department about possible changes in requirements.

Goals and Objectives

The Department of Languages and Cultures offers language instruction in eight languages: Chinese, French, German, Italian, Japanese, Latin, Russian, and Spanish. A student interested in a teaching career may elect French or Spanish as an area of specialization

leading to a Bachelor of Science in Education. Courses in culture, civilization, oral expression, literature, and phonetics are included in the area of concentration. Students wishing to combine proficiency in languages and cultures with another major may elect a minor in either French or Spanish, as well as basic and intermediate courses in the other languages offered. Area concentrations in French, German, and Spanish are offered for students in early childhood education, elementary education, and secondary education.

As part of the department's mission in general education, the languages and cultures curriculum serves to enhance the quality of the students' liberal arts education with an international and multicultural perspective. In addition to developing proficiency for communication with speakers of other languages, the program also offers courses in culture and civilization taught in English to support the goals of global/cultural awareness and international education.

Required Courses for Bachelor of Arts in French

Required courses are: 10.203, 10.204, 10.205, 10.206, 10.207, 10.211, 10.402, 10.422, 10.423

Choose One: 20.311 or 20.411.

Electives should be chosen from French courses numbered above 10.204 with advisement.

Required Courses for Bachelor of Arts in German

The bachelor's degree program in German is currently undergoing revision. Students should inquire in the department about new requirements.

Required Courses for Bachelor of Arts in Spanish

The following courses are required: 12.203, 12.204, 12.205, 12.206, 12.207, 12.211, 12.214, 12.331, 12.402, 12.421, and English

Choose one: 20.311 or 20.411.

Electives should be chosen from Spanish courses numbered above 12.204 with advisement.

ment.

General Education Courses

Other than the General Education distribution requirements, the department does not restrict the choice of courses in this area, however, students are encouraged to choose general education courses in consultation with their advisers.

Placement

Students who have studied a language elsewhere should consult the department chairperson for appropriate placement. Generally, the student should schedule courses as follows:

- With no previous language study, schedule special sections of FL (Foreign Language) 100 for beginners in French, German and Spanish, if schedule allows.
- With one year of high school study or equivalent, schedule FL 101.
- With two years of high school study or equivalent, schedule FL 102.
- With three years of high school study or equivalent, schedule FL 203.
- With four years of high school study or equivalent, schedule FL 204.

Individual Oral Practice

Tapes for language courses are available for individual practice in the language laboratory, located in Old Science Hall, Room 238.

Programs Abroad

All language students are urged to seek opportunities to study abroad. An exchange and internship program with the University of Nancy's Faculté des Lettres and the Commercial Institute in Nancy, France, brings French students to Bloomsburg University. It affords Bloomsburg University students in French, regardless of their major, to study at Nancy. French majors and/or business majors with a strong concentration in French, are especially encouraged to take part in this program.

Students in Spanish, regardless of their majors, may participate in summer internships in Puerto Rico. Students are also encouraged to participate in the summer study abroad program at the University of Salamanca, Salamanca, Spain. An exchange program for students in Spanish is also planned between Bloomsburg University and the University of Puerto Rico.

Students also are encouraged to participate in other summer study abroad programs organized by the department and in accredited programs sponsored by other State System in-

stitutions and by other colleges and universities. The department chairperson should be consulted regarding study abroad plans.

Minors in French and Spanish

A minor is available in French and Spanish. Students should consult the chairperson. It is recommended that students who major and/or minor in French and Spanish also elect a curriculum in related fields such as a second foreign language, business, English, fine arts, history, philosophy, sociology, speech, and theater. A minor in German is planned.

Early Childhood Education, Elementary Education, Secondary Education

Students majoring in early childhood education and elementary education may elect an area of concentration in French, German or Spanish. Students should consult their advisers in the Department of Languages and Cultures about course selection. It is recommended that courses in culture and civilization, oral expression, literature, phonetics, and FL in elementary school be taken to complete the area of concentration.

The area of concentration for students in early childhood education and elementary education is under revision, and students should inquire about new requirements.

Requirements for a major leading to the Bachelor of Science in Education are found in the section on Secondary Education. Students in this program should also include a course in child psychology and a course in anthropology. Students should inquire in the department about changes in the requirements.

Language Awards

Outstanding Academic Achievement — This award is presented to any graduating senior who:

- a. has a minimum QPA of 3.8 for all courses in the major (A student majoring in more than one language may be considered for an award in each language.);
- b. has a minimum QPA in all work at the university of 3.5; and
- c. is recommended by the majority of the faculty of the major language.

Chairperson's Award — This award is presented to a senior majoring in a foreign language who:

- a. has completed a minimum of 21 semester hours in the language;
- b. excels in the language;
- c. has rendered language-related service to the department and the university;
- d. is recommended by the majority of the faculty of the major language.

French (Code 10)

10.100 Foundations of French Language and Culture (3) — Seeks to develop novice proficiency with emphasis on intercultural communication in the context of the Francophone world. *Language laboratory activities required.*

10.101 French I (3) — Seeks to develop the four language skills and acquaint students with elements of francophone culture. *For students with no more than two years of French. Practice in the language laboratory required*

10.102 French II (3) — Continuation of 10.101. *Prerequisite: 10.101 or equivalent*

10.203 French III (3) — Continuation of development of the four language skills. Emphasis on reading. Study of francophone culture. *Practice in the language laboratory. Prerequisite: 10.102 or equivalent*

10.204 French IV (Fall) (3) — Continuation of 10.203. Emphasis on culture and oral communication skills. Practice in the language laboratory. *Prerequisite: 10.203 or equivalent*

10.205 Applied Phonetics and Pronunciation (3) — Analyzes French sound system. Drills on pronunciation and intonation. Selections of prose, poetry, and songs for imitation. *Not offered every semester. Prerequisite: 10.102 or equivalent*

10.206 Structure of the French Language (3) — Thorough study of grammar and syntax and use of idioms through applied exercises. Introduction to French morphology. *Not offered every semester. Prerequisite: 10.204 or equivalent*

10.207 Conversation: French Daily Life and Customs (3) — Prepared and free speaking activities about everyday life and customs in francophone countries. *Not offered every semester. Prerequisite: 10.204 or equivalent or concurrently with 10.204 with consent of the chairperson*

10.211 Foundations of French Culture and Civilization (Fall) (3) — Reviews major developments of French culture from an historical point of view. Taught in English; knowledge of French unnecessary. *Special projects for French*

majors.

10.212 France Today (3) — Presents major aspects of life in France today. Taught in English; knowledge of French unnecessary. Special projects for French majors. *Not offered every semester*

10.281 - 10.289 Special Topics (1-3) — Provides knowledge and training in fields usually not covered in regular courses. Content determined by instructor and varies each time course is offered. Topics may include French for travelers, French gastronomy, Quebec culture. *Not offered every semester*

10.290 French Studies Abroad (1-6) — *Prerequisite: Minimum two semesters of French or equivalent or consent of the chairperson*

10.295 Art and Culture of France (3) — Provides a study-tour of France with attention to French art as seen in relation to its social and cultural environment. Visits to places of artistic and cultural interest in and around Paris and the provinces. *Not offered every semester. Prerequisite: Consent of the instructor*

10.309 Commercial French (3) — Acquisition of French business language and terminology in reading, writing, and speaking. Includes cultural content of francophone culture. Provides an introduction to business correspondence. *Not offered every semester. Prerequisite: 10.204 or equivalent*

10.331 Selected 20th Century Writers (Fall) (3) — Students study French for reading and cultural knowledge; selected modern works. *Prerequisite: 10.204 or equivalent*

10.401 Advanced French Language (3) — Presents a thorough review of phonology, morphology, syntax, and semantics. Practical application in advanced speaking including activities with development of cultural proficiency. *Not offered every semester. Prerequisite: 10.206 or consent of the chairperson*

10.402 Contemporary Issues in Francophone Media (3) — Presents further development of language fluency through discussion of current topics and issues selected from francophone newspapers and magazines. *Not offered every semester. Prerequisite: 10.207 or equivalent*

10.409 Commercial French II (3) — Studies French business life aiming at preparing students for internships in business in France, Quebec or a branch of a French company in the U.S. Reviews business correspondence and cultural content. *Not offered every semester. Prerequisite: 10.209 or equivalent*

requisite: 10.309

10.422 Masterpieces of French Literature (3)

— Studies the most significant writers and playwrights of France. *Not offered every semester.* *Prerequisite: 10.206 or consent of the chairperson*

10.423 Black Francophone Writers and Culture (3)

— Presents major aspects of life in Black francophone countries and major writers in those countries. *Taught in French.* *Not offered every semester.* *Prerequisite: 10.204 or consent of the chairperson*

10.490 Independent Study in French (1-9)

— Provides for individual study of a particular aspect of French civilization, language or literature under faculty supervision. *Prerequisites: Consent of the instructor and the chairperson*

German (Code 11)

11.100 Foundations in German Language and Culture (3) — Seeks to develop novice proficiency with emphasis on intercultural communication in the context of the German-speaking world. *Language laboratory activities required*

11.101 German I (3) — Develops the four language skills and acquaints students with elements of German-speaking cultures. *For students with no more than two years of German. Requires practice in the language laboratory*

11.102 German II (3) — Continuation of 11.101. Reading and writing given additional emphasis. *Prerequisite: 11.101 or equivalent*

11.121 German Authors of the 20th Century I (3) — Examines works of major German authors such as Hesse, Brecht, Mann, Kafka, Durenmatt, and Boll. *Taught in English; knowledge of German unnecessary. Readings in German and special projects for German majors. Not offered every semester*

11.122 German Authors of the 20th Century II (3) — Continuation of 11.121. *Taught in English; knowledge of German unnecessary. Readings in German and special projects for German majors. Not offered every semester*

11.203 German III (3) — Development of the four language skills. Basic grammar reviewed and new grammatical concepts presented. Reading and study of the culture given additional emphasis. *Not offered every semester. Prerequisite: 11.102 or equivalent*

11.204 German IV (3) — Continuation of 11.203. Emphasizes culture and communication. *Not offered every semester. Prerequisite: 11.203 or equivalent*

11.206 Grammar and Composition (3) — In-depth study of German grammar. Stresses application of grammatical principles in controlled and free written composition. *Not offered every semester. Prerequisite: 11.204 or equivalent*

11.207 Conversation: Daily Life and Customs in German-Speaking Countries (3) — Emphasizes student participation in prepared and free-speaking activities on daily life in German-speaking cultures. Outside readings and oral reports assigned. Grammar reviewed when necessary. *Not offered every semester. Prerequisite: 11.204 or equivalent or concurrently with 11.204 with consent of the chairperson*

11.211 German Culture and Civilization I (3) — Provides an understanding of the geography, government, customs, education, arts, and history of the German-speaking countries, as well as a vivid sense of the current scenes in these countries. *Taught in English; knowledge of German not required. Special projects for German majors. Not offered every semester*

11.212 German Culture and Civilization II (3) — Continuation of 11.211. *Taught in English; knowledge of German not required. Not offered every semester*

11.290 German Studies Abroad (1-6) — *Prerequisite: Minimum of two semesters of German or consent of the chairperson*

11.309 Commercial German (3) — Acquisition of German commercial language and terminology in reading, writing, and speaking. Background of business life in Germany today, in German culture and society. *Not offered every semester. Prerequisite: 11.206 or equivalent*

11.331 Selected 20th Century Writers (3) — Current German writers for reading and cultural knowledge. Development of the four skills continues. *Not offered every semester. Prerequisite: 11.204 or equivalent*

11.402 Contemporary Issues in German Media (3) — Further language development, especially of conversation, through discussion of current topics and issues selected from German language newspapers and magazines. *Not offered every semester. Prerequisite: 11.207 or equivalent*

11.403, 11.503 Workshop (3) — Presents selected materials for practical use. *Offered on demand only. Prerequisite: 11.206 or 11.207 or consent of the instructor*

11.420 Seminar: Mass Culture and High Culture (3) — Readings and discussion of cultural issues from 1870 to 1933. Background in

culture, society, and methods of cultural critique. *Not offered every semester. Prerequisite: 300 level German or consent of the instructor*

11.490 Independent Study in German (1-9) — Provides for individual study of a particular aspect of German civilization, language, or literature under supervision of a faculty member. *Prerequisite: Consent of the instructor and the chairperson*

Spanish (Code 12)

12.100 Foundations in Spanish Language and Culture (3) — Seeks to develop novice proficiency with emphasis on intercultural communication in the context of the Spanish-speaking world. *Language laboratory activities required.*

12.101 Spanish I (3) — Develops the four language skills; acquaints students with elements of Hispanic culture. For students with no more than two years of Spanish. *Requires practice in language lab*

12.102 Spanish II (3) — Continuation of 12.101. Reading and writing given additional emphasis. *Prerequisite: 12.101 or equivalent*

12.203 Spanish III (3) — Continued development of skills and culture. Increased emphasis on reading and writing.

12.204 Spanish IV (3) — Continuation of 12.203. *Prerequisite: 12.203 or equivalent*

12.205 Phonetics: Theory and Practice (3) — Seeks to improve student's ability to communicate effectively in spoken Spanish. Provides a detailed study of Spanish sound and intonation patterns through group and individual practice. Attends to individual pronunciation problems. *Not offered every semester. Prerequisite: 12.102 or equivalent*

12.206 Structure of the Spanish Language (3) — Study of Spanish grammar and syntax through applied exercises and introduction to Spanish morphology. *Not offered every semester. Prerequisite: 12.204 or equivalent*

12.207 Conversation: Hispanic Daily Life and Customs (3) — Emphasizes student participation in prepared and free-speaking activities about everyday life and customs in Spanish-speaking countries. *Not offered every semester. Prerequisite: 12.204 or equivalent or concurrently with 12.204 with consent of the chairperson*

12.208 Conversation for Health Professionals (3) — Emphasizes development of speaking and comprehension for communication with Spanish-speaking health care clients. *For health*

services students and other interested persons. Not offered every semester. Prerequisite: 12.204 or equivalent

12.211 Spanish Culture and Civilization (Fall) (3) — Provides an understanding of Spain through geography, education, customs, fine arts, and history. Taught in English; knowledge of Spanish not required. *Special projects for Spanish majors*

12.212 Spanish-American Culture and Civilization (Spring) (3) — Provides an understanding and appreciation of the present and past life of the Spanish-American Republics. Studies Aztec, Maya, and Inca cultures using films and outside readings. *Taught in English; knowledge of Spanish language not required*

12.214 The Hispanic World Today (3) — Provides an understanding and appreciation of the present Spanish-speaking world, in both Spain, Spanish-American countries, and Spanish-speaking groups in the U.S. through geography, history, economics, politics, education, customs, and fine arts. *Taught in Spanish for Spanish majors and other interested people. Not offered every semester. Prerequisite: 12.204 or consent of instructor*

12.281-12.289 Special Topics (1-3) — Provides knowledge and training in fields not usually covered in regular courses. Content is determined by instructor and varies. *Topics may include Spanish for Travelers and Women in Spanish Literature. Not offered every semester. Prerequisite: Varies according to the nature of the topic*

12.290 Spanish Studies Abroad (1-6) — *Prerequisite: Minimum two semesters of Spanish or consent of the chairperson*

12.306 Structure and Composition (3) — Review of syntax and structure with application in composition. *Not offered every semester. Prerequisite: 12.206 or consent of instructor*

12.309 Commercial Spanish (3) — Acquaints students with basic skills in Spanish trade correspondence and commercial reading. Emphasizes vocabulary and commercial idioms. Stresses elementary knowledge of commercial life and methods. *For business students and others who desire to enhance their knowledge of Spanish. Not offered every semester. Prerequisite: 12.204 or an equivalent proficiency*

12.331 Selected 20th Century Writers (3) — Reading and discussion of selected modern works. *Not offered every semester. Prerequisite: 12.207 or an equivalent proficiency*

12.402 Issues in the Hispanic Media (3) —

Provides for further development of language fluency through discussion of a variety of topics and current issues in Hispanic media. *Practice in advanced conversation emphasized. Not offered every semester.* Prerequisite: 12.207 or an equivalent proficiency

12.421 Hispanic Prose (3) — Reading and discussion of prose works by selected Spanish and Spanish American writers, concentrating on 20th century authors. *Taught in Spanish. Not offered every semester.* Prerequisite: 12.207 or an equivalent proficiency

12.422 Hispanic Theater and Poetry (3) — Reading and discussion of plays and poetry by selected Spanish and Spanish American writers, concentrating on 20th century authors. *Taught in Spanish. Not offered every semester.* Prerequisite: 12.207 or an equivalent proficiency

12.430 Short Story (3) — Acquaints students with the short story as an expression of culture by Spanish, Spanish American, Chicano, and Puerto Rican authors and sensitizes students to cultural values in the Hispanic world. *Not offered every semester.* Prerequisite: 12.207 or an equivalent proficiency

12.490 Independent Study in Spanish (1-9) — Provides for individual study of a particular aspect of Hispanic civilization, language, or literature under the supervision of a faculty member. Prerequisites: *Consent of the instructor and the chairperson*

Russian (Code 13)

13.101 Russian I (Fall) (3) — Develops the four language skills and studies elements of Russian culture. Requires practice in the language laboratory. Also offered in spring on demand.

13.102 Russian II (Spring) (3) — Continuation of 13.101. Prerequisite: 13.101 or equivalent

13.103 Russian III (3) — Continued development of four skills. Emphasis on reading and culture. *Not offered every semester.* Prerequisite: 13.102

13.104 Russian IV (3) — Continuation of 13.103. *Not offered every semester.* Prerequisite: 13.103

13.290 Independent Study in Russian (1-9) — Individual study of a particular aspect of Russian civilization, language, or literature under faculty supervision. Prerequisite: *Consent of the instructor and the chairperson.*

Italian (Code 14)

14.101 Italian I (3) — Develops the four language skills and studies the Italian culture. Stresses basic grammar. *Not offered every semester*

14.102 Italian II (3) — Continuation of 14.101. Emphasizes reading and writing. *Not offered every semester.*

General (Code 16)

The sequence of courses in Japanese is *Not offered every semester.* Students should inquire in the Department of Languages and Cultures.

16.101, 16.102, 16.103, 16.104 Self-Instructional Learning Program in Japanese I (3) Japanese II (3), Japanese III (3) and Japanese IV (3) — self instructional learning.

16.105 Chinese I (3) — Basic elements of Mandarin Chinese, with emphasis on spoken language. Introduces the Chinese culture. *Requires practice sessions in language lab.*

16.106 Chinese II (3) — Continuation of 16.105. Begin study of the Chinese characters. *Requires practice sessions in language laboratory.* Prerequisite: 16.105 or equivalent

16.109 Language for Singing (1) — Practice and acquisition of correct pronunciation in French, German, and Italian for voice majors and students singing in choirs. Spanish upon demand. *Not offered every semester.*

16.211 Chinese Culture and Civilization I (Fall) (3) — Chinese culture and civilization in historical perspective, with emphasis on art and philosophy. *Taught in English*

16.212 Chinese Culture and Civilization II (Spring) (3) — Chinese culture and civilization today, with focus on art, political philosophy, customs, and new directions. *Taught in English*

16.400 Study Abroad (1-8) — *By consent of the chairperson*

Latin (Code 18)

18.101 Latin I (3) — Develops reading and writing skills; emphasizes correct classical pronunciation. Introduction to Roman culture and civilization. *Not offered every semester*

18.102 Latin II (3) — Continuation of 18.101. Develops reading and translation skills; teaches classical references through selected readings. *Not offered every semester.* Prerequisite: 18.101 or equivalent

Department of Management

Faculty

Mark D. Larson, Chairperson, Associate Professor — B.S., University of Iowa; M.A., Ph.D., The Ohio State University

Mainuddin Afza, Associate Professor — B. Com., University of Rajshahi; M. Com., University of Rajshahi; M.B.A., Youngstown State University; Ph.D., National Academy of Science, Yerevan, Armenia

M. Ruhul Amin, Professor — B.A., M.A., The University of Dhaka; M.A., D.P.A., Carleton University; M.A., Ph.D., The University of Akron

Charles M. Chapman, Associate Professor — B.A., University of Northern Colorado; M.A., New York University

Francis J. Gallagher, Professor — A.B., Stonehill College; M.B.A., Temple University

Howard J. Kinslinger, Associate Professor — A.B., Brandeis University; M.B.A., The City College of New York; Ph.D., Purdue University

Stephen J. Markell, Associate Professor — B.A., SUNY at Albany; M.A., Ph.D., University of North Carolina at Chapel Hill

Irem Ozkarahan, Associate Professor — B.Sc., Middle East Technical University, Turkey; M.A.Sc., University of Toronto, Canada; Ph.D., Arizona State University

Minoo Tehrani, Associate Professor — Michigan Technological University; B.S., Pahlavi University, Shiraz, Iran; M.S., Ph.D., Arizona State University

Peter B. Venuto, Professor — B.A., Syracuse University; M.B.A., Ph.D., University of Santa Clara

Pamela M. Wynn, Professor — B.A., M.A., Ph.D., University of Texas at Arlington

Degree Program

Bachelor of Science in Business Administration

A total of 63 semester hours is required for a major in management under the business administration degree program. Majors also offered in accounting, computer and information systems, business administration economics, finance, management information systems, and marketing.

Goals and Objectives

The curriculum in the Department of Management helps students develop analytical thinking and to apply those analytical abilities to business problem solving. To achieve these aims, faculty go beyond the confines of textbooks to the realities of the business world. Students gain a broad based understanding of the role, place, and purpose of the business organization. The management major is especially appropriate for those who combine leadership abilities with an interest in business. The skills and knowledge gained by management majors enables them to succeed in a changing and competitive business environment.

Required Courses

A total of 15 semester hours is required from the following courses: Computer and Information Systems 92.254; Management 93.345, 93.348, 93.449, and 93.457; and 3 semester hours of a business elective.

Required courses for the core curriculum of the business administration degree include: Economics 40.346; Accounting 91.220, 91.223; Computer and Information Systems 92.150; Management 93.344, 93.445, and 93.446; Finance 96.313; Marketing 97.310; and Business Law 98.331.

Elective Courses

Select courses in business and economics to complete a minimum of 63 semester hours. Courses designated with a 91, 92, 93, 96, 97, or 98 prefix are business courses and those with a prefix of 40 are economics courses. Additional courses permitted as electives include: Speech Communication 25.307; History 42.223 (a substitute for 42.224 and 40.423), 42.472; and General Business 90.101, 90.241, 90.431, and 90.432.

Note: 90.101 will not be allowed for credit as a business elective once a student has completed 6 semester hours in business administration courses.

Free Electives

Select free elective courses as needed to meet the 128 semester hours required for grad-

uation.

General Education Courses

Required general education courses include: English 20.101 and 20.201; Communication Studies 25.103; Economics 40.246 (or Mathematics 53.123), 40.211, 40.212; Mathematics 53.118. Also required are 3 semester hours in Values and Ethics; 3 semester hours in Fitness and Recreational Skills; 12 semester hours in Humanities and the Arts; 12 semester hours in Social and Behavioral Sciences, and 12 semester hours in Natural Sciences and Mathematics.

Management (Code 93)

93.344 Principles of Management (3) — Administrative, organizational, and behavioral theories and functions of management, contributing to the effective and efficient accomplishment of organizational objectives. *Prerequisite: 40.212*

93.345 Human Resource Management (3) — Provides an understanding of current corporate human resource practices. Discusses common human resource management problems, tools and procedures for dealing with such problems, EEO guidelines and their implications. Examines topics such as performance evaluation, human resource planning, compensation, and work motivation. *Prerequisites: Junior standing, Computer and Information Systems 92.150 or equivalent*

93.346 Labor and Industrial Relations (3) — Describes administration of the relationship between management and the labor force, both where that relationship is governed by a collective bargaining agreement and where it is not. Includes development of the social and legal status of trade unions, organizing, negotiations, strikes, grievance procedure, and union security.

93.348 Operations Management (3) — Identification and integration of major components of operations and logistics management and their impact on organizational productivity and performance. *Prerequisites: 93.344, Economics 40.246 or Mathematics 53.123*

93.391 Small Business Management (3) — Introduces environment of small business in the United States. Describes types of small business and problems associated with each type. Covers ownership, start up, franchising, fi-

nance, accounting, personnel, risk management, inventory, advertising and marketing, and production processes. Special emphasis is given to incentives and legal requirements of Pennsylvania with regard to small businesses.

93.432 Internship in Management (3-6) — Integrates classroom experience and practical work experience in industrial, business, or government work situations. Allows students to translate academic theories and principles into action, to test career interests, and to develop skills and abilities through carefully planned and supervised problems related to the field of management. *Prerequisites: 93.344 or approval of internship supervisor, QPA of 2.50, 80 semester hours*

93.440 Small Business Institute Seminar (1-3) — Teams of students work with local businesses in a consultancy capacity to aid small businesses while applying business principles. Work includes analysis of a problem, determination of alternative solutions, recommendation of the optimum course of action by means of an oral presentation to business owners. *Prerequisite: 93.344 or consent of instructor*

93.445 Managerial Communications (3) — Studies the process and structure of communication in the business organization and factors affecting the flow of information. Emphasizes verbal, nonverbal, and written communication, uses a number of models to understand miscommunication and conflict, and develops appropriate communication strategies. Provides insight into networking, groupthink, and lobbying in organizations. *Prerequisites: 93.344, Marketing 97.310, and Junior standing*

93.446 Business Policies and Strategies (3) — Provides a view of business problems from the perspective of the CEO. Strategic formulation and administration of the total organization including integrative analysis and strategic planning. Comprehensive case studies enabling students to deal with wide-ranging and complex issues are the primary tools by which integration is accomplished. This course is to be taken after all other business administration core requirements. *Prerequisites: 93.344, Finance 96.313, Marketing 97.310, and Senior standing*

93.449 Organizational Behavior (3) — Focuses on personal, interpersonal, and group processes in organizations. Understanding human behavior as it is in organizations, finding the

hidden aspects of groups and organizations, and leadership are among the major themes.
Prerequisite: 93.344

93.456 International Management (3) — Concepts and practices of multinational firms. Objectives, strategies, policies, and organizational structures for operating in various environments. Analysis of comparative management practices, problems, and issues. Impact of national and cultural environments.

93.457 Business and Society (3) — Relates the business system to the social, technological, political, and economic sectors. Examines the power and responsibilities of business as a major institution in the context of social responsiveness and ethics. Provides techniques and strategies for managing social issues.

93.498 Special Topics — Management (3) — Examines current or advanced issues in the field of management not normally examined in depth in other courses.

Department of Computer and Information Systems

Faculty

- James S. Dutt, Chairperson, Associate Professor — B.S., M.S., Ph.D., The Pennsylvania State University
- Patricia M. Boyne, Assistant Professor — B.A., Ladycliff College; M.S., The Pennsylvania State University; CDP
- Frank S. Davis Jr., Professor — B.S., M.Ed., Shippensburg University; Ph.D., University of Pittsburgh
- Carl J. Chimi, Associate Professor — B.A., M.B.A., Ph.D., University of Massachusetts
- Harold K. Frey, Associate Professor — B.S., Lock Haven University; M.A., Iowa State University; M.S., Elmira College
- Gene M. Gordon, Associate Professor — B.A., Southampton College; M.A., Antioch University; Ed.D., University of Massachusetts
- Charles J. Hoppel, Associate Professor — B.S., University of Scranton; M.E.E., Ph.D., Syracuse University

Degree Program

Bachelor of Science in Business Administration

A total of 66 semester hours is required for a major in management information systems under the business administration degree program. Majors also are offered in accounting, business administration economics, finance, management, and marketing.

Goals and Objectives

The Department of Computer and Information Systems in the College of Business offers two degree tracks: the Bachelor of Business Administration with a major in Management Information Systems and the Bachelor of Science in Computer and Information Science. Both programs involve learning how to develop information systems for the business environment. They differ in emphasis. For information on the latter program, see *Computer and Information Science*.

The Management Information Systems (MIS) major provides both a broad background in business as well as an in-depth knowledge of the process of system development. Students gain a familiarity with the functions

of management, accounting, marketing, and finance. Specialized courses focus on problem solving techniques, structured programming, systems analysis and design, and the process of developing managerial computer applications. The program stresses the importance of computer skills. Students learn a variety of programming languages and work on a number of different hardware platforms, including networked microcomputers, workstations, and multiuser minicomputers and mainframe systems.

The program prepares students for professional employment in the areas of system development and maintenance, information resource management, management of information systems, and end user computing support.

Admission

Students enrolled in other colleges within Bloomsburg University who wish to transfer into the MIS curriculum must have completed a minimum of 15 semester hours at the university.

Required Courses

A total of 27 semester hours in Computer and Information Systems courses is required for a major in MIS. Courses include: 92.177, 92.251, 92.252, 92.254, 92.256, 92.351, 92.352, 92.354 and 92.456.

Core courses required for the degree program in business administration total 30 semester hours and include: Economics 40.211, 40.212, 40.246, and 40.346 or Mathematics 53.118; Accounting 91.220 and 91.223; Computer and Information Systems 92.150; Management 93.334, 93.445, and 93.446; Finance 96.313; Marketing 97.310; and Business Law 98.331.

Elective Courses

An additional 9 semester hours are required in business and economics courses. Courses designated with a 40, 91, 92, 93, 96, 97, or 98 prefix are eligible. Additional courses permitted as electives include: Speech Communication 25.307; History 42.223 and 42.472; and General Business 90.101, 90.241, 90.431, and 90.432.

Note: 90.101 will not be allowed for credit as a business elective once a student has completed 6 semester hours in business administration courses.

Free Elective Courses

An additional 8 to 11 semester hours in free elective courses are needed to meet the 128 semester hours required for graduation.

General Education Courses

In addition to mathematics and economics, CIS majors are required to take English

20.101 and 20.201 as general education selections.

Internship

While an internship in MIS is not required for a degree, students are strongly encouraged to take 92.432. This course, which may be taken for a maximum of 6 semester hours, can be counted only as a free elective.

Department of Marketing

Faculty

Stephen S. Batory, Chairperson, Associate Professor; B.S., King's College; M.B.A., Old Dominion University; D.B.A., University of Maryland

Mary K. Erickson, Professor; B.S., M.S., The Ohio State University; Ph.D., Virginia Polytechnic Institute and State University

Kiran Karande, Assistant Professor, B.E., M.B.A., University of Bombay; Ph.D., University of Houston

Salim Qureshi, Associate Professor; B.S., University of Karachi; M.B.A., Adelphi University; Ph.D., The Union Graduate School of Ohio

Julie Toner Schrader, Assistant Professor; B.S., M.B.A., Central Missouri State University

Robert N. Watts Jr., Associate Professor; B.S., Susquehanna University; M.B.A., Ohio University

Degree Program

Bachelor of Science in Business Administration

A total of 63 semester hours is required for a major in marketing under the business administration degree program. Majors also offered in accounting, business administration economics, finance, management information systems, and management.

Goals and Objectives

The marketing curriculum provides specialized knowledge and skills to prepare students for entry-level marketing positions in sales, sales management, retail management, promotion, research, distribution and other areas. These positions can be obtained in either the profit or non-profit sector. In addition, students are prepared for graduate study.

Required Courses

A total of 21 semester hours is required from the following courses in marketing: 97.360, 97.370, 97.430, 97.440, 97.460, 97.490, and 3 semester hours of a marketing elective.

Required courses for the core curriculum of the business administration degree include: Economics 40.211, 40.212, 40.246 or Mathe-

matics 53.123, and 40.346; Mathematics 53.118; Financial Accounting 91.220 and Managerial Accounting 91.223; Computer and Information Systems 92.150; Management 93.344, 93.445, 93.446; Finance 96.313; Marketing 97.310; and Business Law 98.331.

Elective Courses

Select courses in business to complete a minimum of 63 semester hours. Elective courses in business may be drawn from courses designated with a 91, 92, 93, 96, 97, or 98 prefix. General Business 90.101, 90.341, and 90.432 also qualify as elective courses.

Note: 90.101 will not be allowed for credit as a business elective once a student has completed 6 semester hours in business administration courses.

In selecting an elective, the student is reminded to have the proper prerequisites and to avoid elected courses below that level for which the student has already been prepared in that subject field.

Free Electives

Select free elective courses as needed to meet the 128 semester hours required for graduation.

General Education Courses

English 20.101 and 20.201, and Speech Communication 25.103 are required as general education courses. No substitutions are permitted for these courses.

Marketing (Code 97)

97.310 Marketing: Principles and Practice
 (3) — Surveys the fundamental features of contemporary marketing systems and the planning required to make available satisfying goods and services to customers at a profit. Explains the role of marketing in society and the institutions which compose the market system. Describes components of the marketing mix-product planning, distribution, pricing, and promotion. *Prerequisite: Economics 40.211, 40.212*

97.320 Marketing for Nonprofit Organizations
 (3) — Hospitals, social service agencies,

universities, clubs, fraternities and sororities, political candidates, governments, churches, and libraries are some of the nonprofit organizations which are challenged to effectively solve their marketing problems. Through understanding and by applying established marketing theory, techniques, and methods, students realize how they can aid organizations in developing a better product, price, distribution, and promotion decisions for the publics they seek to serve. *Prerequisite: 97.310*

97.350 Retail Management Concepts (3) — Presents retailing as a dynamic aspect of the marketing distribution system. Ultimate consumer/marketing analysis, store location, store layout, merchandising, pricing, promotional issues, and problems are considered. *Prerequisites: 97.310, Economics 40.212*

97.360 Advertising Management (3) — Studies the advertising element of the marketing/promotional program from a management perspective. Examines advertising's role in business and society. Advertising's use of the communication process is studied from a theoretical and practitioner's perspective. Development of an ad campaign is highlighted with emphasis on management decisions involved in planning and execution. Special attention given to budgeting, copywriting, media analysis, and choice. *Prerequisite: 97.310*

97.370 Sales Management (3) — Studies the personal selling element of the marketing/promotional program from a management perspective. Recruiting, selecting, training, organizing, motivating, compensating, evaluating, and controlling the sales force are treated, as well as management's planning responsibilities which include designing intelligence systems, forecasting and establishing sales territories. Special consideration is given to sales management's inputs and integration with marketing management. *Prerequisite: 97.310*

97.410 International Marketing Management (3) — Applies the managerial process to the development of international marketing programs. Emphasizes the development and determination of objectives and methods of organization including the execution of research, advertising, and distribution activities. Considers special problems of adopting marketing principles to fit conditions in different countries. *Prerequisite: 97.310*

97.430 Consumer Motivation and Behavior (3) — Analyzes the role of the consumer as the ultimate buyer of the product and the strategy and forces directed at the consumer by the seller. Topics include models of consumer buying behavior, consumer motivation, impact of advertising on product, and consumer as decision maker in the market place. *Prerequisite: 97.310*

97.431 Independent Study in Marketing (3) — Develop research skills in an academic and experience-based setting through collaborative research with a faculty member. Apply marketing theory to an employment situation or research objective. *Prerequisite: Nine hours of marketing class*

97.432 Internship in Marketing (1-6) — *Prerequisites: 97.310, 2.50 QPA, 80 semester hours, and Junior or Senior standing*

97.440 Marketing Research (3) — Develops the skills of the scientific marketing research procedure (problem definition, research design, data collection, analysis, and interpretation). Applies recent developments in marketing information systems to product planning, advertising research, consumer and competitive analysis. *Prerequisites: 97.310 and Economics 40.346*

97.460 Marketing Management (3) — Presents an advanced study of the marketing programs from the systems and managerial viewpoint. Applies analytic, communicative, and problem-solving skills to evaluation and creative planning in the marketing environment. Uses business marketing cases as a vehicle for developing the marketing executive's abilities. *Prerequisite: 97.310*

97.480 Industrial Marketing Strategy (3) — Strategies for marketing products and services to industrial, commercial, and governmental markets. Changing industry and marketing structures. *Prerequisite: 97.310*

97.490 Contemporary Problems/Issues in Marketing (3) — Explores major issues, trends, and problems characterizing the current marketing scene. Encourages students to do extensive reading in current marketing and other related literature. Theoretical, environmental research, and trade-off issues in marketing are assessed. Case study, group projects, and group dynamics are used. *Prerequisites: Senior standing and 6 semester hours in marketing*

Department of Mass Communications

Faculty

Dana R. Ulloth, Chairperson, Professor — B.A., Southern College; A.M., Ph.D., University of Missouri

Walter M. Brasch, Professor — A.B., San Diego State University; M.A., Ball State University; Ph. D., Ohio University

Richard J. Ganahl III, Assistant Professor — B.A., University of Missouri at St. Louis; B.J., M.A., Ph.D., University of Missouri at Columbia

William T. Green, Associate Professor — A. B., Heidelberg College, M.A., Ph.D., University of Toledo

John Maitlen-Harris, Assistant Professor — B.Ed., University of Sydney; Litt.B., University of New England; M.A., University of Florida; Ph.D., University of Texas at Austin

Maria Teresita G. Mendoza-Enright, Associate Professor — B.A., M.A., University of the Philippines System; M.A., University of Chicago; Ph.D., University of Wisconsin-Madison

Degree Program

Bachelor of Arts in Mass Communications

A total of 33 to 41 semester hours is required for a major in mass communications.

For information on the Bachelor of Science in Education which offers an area of specialization in communications/media, see the section on Secondary Education.

Goals and Objectives

The mass communications program is designed to balance the needs for broad knowledge of the liberal arts and natural sciences, professional preparation, writing development and understanding of the critical and theoretical issues confronting people employed within the media. To achieve the first of these four goals, majors are expected to take at least 80 semester hours in the humanities and sciences.

Admission Requirements

Admission to the mass communications program is by application to the chair and is

limited to the maximum enrollment each semester that can be reasonably accommodated by departmental resources. Annual enrollment is limited to approximately 60 students who should have achieved a cumulative grade point average of 2.5 or higher. Acceptance into the program depends, however, not only on the QPA, but also on past experience and potential. Students should exhibit strong writing, visual, and creative qualities and a record of interest and participation in media-related extracurricular activities. Students are encouraged to make a case for their admission in the light of previous experience even if they feel their QPAs may not alone justify admission. Students will be notified of their acceptance as mass communications majors as quickly as possible. Students are expected to have declared their majors no later than the time they have accumulated approximately 72 semester hours.

The major in mass communications consists of required and elective courses in each of the areas of competence. The elective courses allow students to specialize in one or two media, depending on the specialties students wish to study.

The major is structured in five blocks, or competency areas.

Department Curriculum

The department's revised curriculum is designed to ensure better preparation for today's changing communications industry. Graduates will be more broadly trained for careers in public relations, advertising, journalism and telecommunications.

The curriculum replaces the traditional medium-specific approach used at most other colleges. At Bloomsburg, it is organized around three competency areas that are portable across a variety of today's and tomorrow's communication careers.

These competencies include theoretical knowledge, writing proficiency and professional development.

Foundation Course (Required) — The introductory course provides a general survey of the role of the mass media in society and treats

critical issues related to the interaction of society and media in a modern setting.

27.110 Mass Communications and the Popular Arts

Writing Proficiency — Almost every position in mass communications related industries requires strong writing abilities. To help develop our students' writing, the Department prescribes 15 credits, of which six are specified.

Required

27.230 Newswriting

27.334 Editing

Electives: Choose Three

27.340 Feature Writing

27.352 Publicity and Public Relations

27.388 Broadcast Journalism

27.450 Public Affairs Reporting

27.485 RTF Authorship Theory and

Practice

Professional Skills — This content area provides the student an opportunity to develop the capability to operate equipment common to an industry, gain creative skills, and develop organizational and management abilities. The Department specifies two courses, and requires the student choose three of the remaining courses.

Required

27.241 Media Graphics

27.271 Media Operations

Electives: Choose Three

27.435 Journalism Workshop

27.446 Magazine Editing & Production

27.371 TV Acting & Directing

27.375 Broadcast Programming & Management

27.390 Film & Video Production

27.480 Telecommunications Workshop

27.251 PR Theory & Practice

27.261 Principles of Advertising

27.297 Mass Communications Practicum

27.366 Design in Advertising

27.455 Public Relations Cases and Problems

27.466 Ad Media & Campaigns

Theoretical Analysis: Four Required — Courses in this area provide the philosophical, theoretical, regulatory, and critical knowledge students need regarding mass communications and society.

27.310 Media Law

27.315 Social Foundations of the Mass Media

27.360 Mass Media Processes & Effects

27.420 Audience Analysis

Capstone Course: One Required — The capstone courses should be related to the student's

specific areas of interest

27.482 Mass Communications Seminar

27.497 Internship (3-9 credits)

Practicums and Internships

Students are required to participate in practica or internships during which they are expected to practice the technical aspects of their specialties. Semester hours earned are in addition to the core and specialty areas. Internships are available on and off campus; some are paid. Students are urged to take both an off-campus internship and an on-campus practicum to be as well prepared technically as possible. Some practica are available on student productions such as The Voice, Bloom News, Spectrum magazine, and a range of other campus communications activities.

**Mass Communications
(Code 27)**

27.110 Mass Communications and the Popular Arts (3) — A comprehensive overview of mass communications and their relative impacts on society and culture. Covers magazines, newspapers, motion pictures, radio, television, public relations, advertising, ethical codes, and media regulations. Not generally applicable toward a major in mass communications.

27.190 History of Film (Spring) (3) — An overview of the history and growth of the motion picture. Studies film genres, historical figures, technicians, and performers. Students must view approximately 15 films during the course in laboratory showings.

27.230 Newswriting (3) — Outlines the "theory" and techniques of news reporting; the historical development of reporting, its practices and principles, and the organizational patterns of news stories and gathering of news. An elementary outline of defamation and libel is included. Student should be able to type 30 to 40 words per minute before enrolling in this course.

27.241 Media Graphics (3) — Computer-generated design and layout problems and applications for printed and visual material including newspaper and magazine pages as well as advertising layouts and visual presentations for video and television material.

27.251 PR: Theory and Practice (3) — An introduction to the development, principles, theories, and practice of public relations as a social and organizational implement. Looks

briefly at the communication process, publicity, community relations, and public affairs practice.

27.261 Principles of Advertising (3) — Introduces students to the basic objectives and procedures of advertising in a modern economy. Examines the variety of components and methods used to achieve specific objectives in advertising campaigns and the type of instruments used for advertising.

27.271 Media Operations (3) — Concentrates on the knowledge and physical use of technical requirements that operate the growing range of equipment needed to produce contemporary radio, television, and video programs.

27.275 Cinema Appreciation (Fall) (3) — Examines film form, theory, and criticism to bring about a better understanding and greater appreciation of the motion picture. Enhances the visual appreciation required in modern media. Approximately 15 films viewed.

27.297 Mass Communications Practicum (3) — Requires participation in film, television, radio or print productions in any of the sequences offered in the department or other departments on campus having similar needs relevant to mass communications.

27.310 Media Law (3) — Surveys legal restraints that influence the nature and content of mass media messages and business practices. Covers historical developments, criminal libel, sedition, defamation, privacy, copyright, obscenity, shield law, freedom of information, free press-free trial, unique broadcast policies, advertising, and antitrust problems.

27.315 Social Foundations of Mass Communications (3) — An interdisciplinary study of the historical, philosophical, social, economic, and legal foundations of American mass media as a base for study of contemporary mass media. Examines media from the perspective of journalists, owners, audience, and government.

27.334 Editing (3) — Designed to improve writing for newspapers, magazines, and brochures. Indicates particular types of styles most used; emphasizes good, tight copy in news stories; offers practice in headline writing, and some elementary layout and design including photo editing. Suggests some defenses to possible defamation and libel problems for copy editors. *Prerequisite: 27.230*

27.340 Feature Writing (3) — Outlines basic requirements for feature-type articles for news-

papers and magazines. Studies various techniques used to gather information and to develop a range of feature articles. Includes practical work as well as the study and discussion of published articles and marketing strategies. *Prerequisite: 27.230*

27.352 Publicity and Public Relations (3) — Comprehensive study of various publicity techniques used in public relations efforts of business, government, and nonprofit organizations. Students prepare press releases, public service announcements, speeches, slide programs, or other appropriate communication vehicles. *Prerequisite: 27.251*

27.360 Mass Media Processes and Effects (3) — Locates specific issues in mass media exposure, identifying various ways in which individuals and the whole body of society depend on information provided by the mass media. *Prerequisite: junior standing*

27.366 Design in Advertising (3) — Principles of advertising layout and design in print and broadcasting. Includes hands-on experience in layout, typography, and paste-up in addition to theory. *Prerequisite: 27.261*

27.367 Television Acting and Directing (3) — Provides instruction in acting and directing for television. Includes laboratory hours. *Prerequisite: 27.271*

27.371 Broadcast Journalism (3) — Studies technical elements of broadcast writing, script formats, and nondramatic material; provides opportunities to study, write, and announce news, commercials, and other broadcast material. *Prerequisite: 27.271 and 27.230*

27.375 Broadcast Programming and Management (3) — Studies television and radio management and programming; examines each medium as a business and the elements of success or failure. Studies some basic economics of media and methods of handling this material as well as codes, laws, and community interests. *Prerequisite: junior standing*

27.390 Film and Video Production (3) — Reviews the basic processes of filmmaking in an introductory but comprehensive manner. Concentrates on making short silent films and requires laboratory hours and field work by arrangement. Students provide their own film stock for shooting, and pay film processing costs. *Prerequisite: 27.271*

27.420 Audience Analysis (3) — Explores the theoretical distinction between the social world of actual audiences and the discursive con-

structs of mass media audiences. Charts the development of an ethnographic understanding of mass media audiences that focuses on the diverse, the particular and unpredictable in everyday life. Stresses design and construction of various research methods on mass media audiences. *Prerequisites:* 27.380 and junior standing; 45.260 recommended

27.435 Journalism Seminar: Special Topics (3) — Studies a variety of ethical and practical problems in journalism. Topics may vary each semester. May be repeated with different topics to a maximum of three seminars with approvals of adviser and chairperson. *Prerequisite:* 27.230

27.440 Public Affairs Reporting (4) — An advanced reporting course on the role of public affairs in news reporting in mass media. Concentrates on a number of governmental "beats" most susceptible to news generation. Students learn basic abilities consistent with entry-level professional reporting requirements in public affairs coverage, including courts, police, and government. *Prerequisite:* 27.340

27.446 Magazine Editing and Production (4) — Acquaints students with principles and techniques of magazine production including manuscript selection and editing, advertising, design, production, circulation, promotion, and various business operations. Study of the nature of magazines as part of a mass communications system. Each semester students produce a community/regional consumer magazine. *Prerequisites:* 27.334, 27.340, or consent of the instructor

27.455 Public Relations Cases and Problems (3) — A study of the use of publicity as a particular element of public relations. Examines specific publicity cases and requires practical hands-on production of written material. *Prerequisite:* 27.352

27.466 Advertising Media and Campaigns (3) — Study of the use of advertising media, methods of selection, and the skills and background required for media buying and traffic planning. Basic principles and applications of advertising research and campaign planning, preparation, and presentation are taught in a problem-solving format. *Prerequisites:* 27.364 and 27.366

27.478 Independent Study (1-3) — Provides for individual work and study in an area of mass communications concentration. Students find a faculty sponsor/adviser and prepare a written proposal, which must have departmental

approval and approval of the dean, College of Arts and Sciences. *Prerequisite:* 27.470

27.480 Telecommunications Production Workshop: Special Topics (3) — A practical workshop program in which telecommunications majors undertake specific instruction on the technical aspects of their major. Topics may change from semester to semester, and students may be required to work on specific projects, such as telethons or television news, as part of their workshop programs. Workshops may be repeated provided topics change. Instructor's and department chairperson's approvals required. *Prerequisite:* 27.415

27.482 Mass Communications Seminar (3) — A seminar program that studies ethical and social problems resulting from the pervasiveness of new technologies. Topics may change from semester to semester. Students may repeat seminars, subject to a change in topic and with the approvals of the instructor and department chairperson. *Prerequisite:* 27.415

27.485 RTF Authorship Theory and Practice (3) — A study of the construction of documentary and dramatic material in terms of telecommunications/film semiotics with an overall survey of production and business problems. A project course designed primarily for film, television, and radio majors moving into mass communications production seminars. *Prerequisite:* 27.271

27.497 Mass Communications Internship (3-9) — Open to junior and senior majors with a QPA of 2.75 in the major, although consideration will be given for other practical experience students may have. May include on-campus or off-campus study of a particular project arranged by the student, adviser, and department chairperson. Interns are expected to have completed several of their basic specialist courses prior to applying for internships. Projects must be submitted in writing at least a month before the project is expected to begin and must be approved by the student's adviser and department chairperson. Course may be repeated within catalog regulations. Internships will become a compulsory part of the mass communications program. Credit is based on 3 semester hours for each 10 hours of work undertaken per week per semester. Limit is 9 total semester hours for internships. Special arrangements must be made for summer internships. *Prerequisite:* 27.415

Note: Prerequisites may be waived by an instructor subject to the concurrence of the departmental chairperson.

Department of Mathematics and Computer Science

Faculty

Charles M. Brennan, Chairperson, Professor — B.S.Ed., Bloomsburg State College; M.A., Montclair State College; Ph.D., The Pennsylvania State University

Harold J. Bailey, Professor — B.S., Albright College; M.Ed., Ph.D., The Pennsylvania State University

Stephen D. Beck, Professor — B.S., Tufts University; M.S., Iowa State University; Ph.D., Rensselaer Polytechnic Institute

Paul C. Cochrane, Professor — B.S., M.S., Ph.D., State University of New York at Albany

Helmut Doll, Assistant Professor — B.A., University of Stuttgart; M.S., Oregon State University; Ph.D., University of California at Santa Barbara

JoAnne S. Grawney, Professor — B.S., Westminster College; M.A., Temple University; Ph.D., University of Oklahoma

Paul G. Hartung, Professor — B.A., Montclair State College; M.A., University of Colorado; Ph.D., The Pennsylvania State University

E. Dennis Huthnance Jr., Associate Professor — B.S., M.S., Ph.D., Georgia Institute of Technology

Scott Inch, Assistant Professor — A.A., WilliamSPORT Area Community College; B.S., Bloomsburg University; M.S., Ph.D., Virginia Polytechnic Institute and State University

Curt Jones, Assistant Professor — B.S., Lock Haven; M.S., University of Iowa; Ph.D., The Pennsylvania State University

Zahira S. Kahn, Associate Professor — B.A., Punjab University; M.Sc., Islamabad University; B.S., Bloomsburg University; M.A., Ph.D., Temple University

Stephen Kokoska, Professor — B.A., Boston College; M.S., Ph.D., University of New Hampshire

Robert Montante, Assistant Professor — B.S., Massachusetts Institute of Technology; M.S., Ph.D., Indiana University

Reza Noubari, Professor — B.S., M.S., Tehran University, M.Sc., Ph.D., University of Manchester, England

Clinton J. Oxenrider, Associate Professor —

B.S., Bloomsburg State College; M.A., The Pennsylvania State University; D.A., Idaho State University

Timothy Phillips, Assistant Professor — B.A., Kutztown University; M.S., Longwood College; Ph.D., The Pennsylvania State University

James C. Pomfret, Professor — B.S., Bates College; M.S., New Mexico State University; Ph.D., University of Oklahoma

Medhi Razzaghi, Professor — G.C.E., Lewes Technical College; B.S., Sussex University; Ph.D., University of London

John H. Riley, Jr. Professor — B.A., Lehigh University; M.S., Ph.D., The University of Connecticut

Yixun Shi, Assistant Professor — B.S., Anhui Normal University at Chuzhon, China; M.S., Shanghai Teachers University, China; Ph.D., University of Iowa

June L. Trudnak, Professor — B.S., Bloomsburg State College; M.S., Bucknell University; Ph.D., The Pennsylvania State University

Erik Wynters, Associate Professor — B.S., University of New Hampshire; M.S., Ph.D., Cornell University

Degree Programs

Bachelor of Arts in Mathematics, Bachelor of Science in Mathematics

The bachelor of arts program requires 45 semester hours for a major in mathematics.

The bachelor of science program requires 56 semester hours for a major in mathematics.

Goals and Objectives

The primary objective of the mathematics program is to provide a thorough background in both the theoretical and real world applications of mathematics. The curriculum and instructional strategies are designed to encourage and promote critical thinking and problem solving skills and the articulation of mathematical ideas.

The Department of Mathematics and Computer Science offers three baccalaureate degree programs: Bachelor of Arts, Bachelor of Science in Mathematics, and Bachelor of Sci-

ence in Computer Science (See section on Computer Science). The department also offers a minor in computer science, one in statistics, and another in mathematics.

The course sequence in all of the degree programs in mathematics is essentially the same through the first two years. The bachelor of arts program in mathematics offers a more flexible curriculum designed to accommodate varied career objectives while the bachelor of science program is specifically applications-oriented with more required courses in mathematical analysis and science. In the bachelor of science program, students select an area of concentration in their junior year to develop proficiency in an area of applied mathematics. Many students choose a joint program in mathematics and computer science, mathematics and statistics or mathematics and an area of business or physical sciences. A student majoring in education who chooses an area of concentration in mathematics essentially follows the bachelor of arts program in mathematics. The department strongly supports the implementation of mathematical and statistical software throughout all the mathematical programs. Students who complete a degree program in mathematics are prepared to continue their studies of mathematics on the graduate level or to enter industry in an area where mathematics is used.

For admission to the major in mathematics, a student should have a thorough preparation in high school mathematics. Students who complete the Advanced Placement Examination with a score of 3 or higher may earn university credit for the first calculus course, 53.125 Analysis I.

General Education Courses

Advisement should be considered before selecting General Education courses in this major.

Required Courses for Bachelor of Arts in Mathematics

Mathematics 53.125, 53.126, 53.185, 53.225, 53.226, 53.241, 53.310, 53.314; Computer Science 56.122 and at least one 3-semester-hours computer science course numbered 56.122 or above. At least three 3-semester-hours mathematics courses at the 300 level including at least one from the classical core consisting of 53.322, 53.331, 53.341, 53.360, 53.411, 53.421, 53.422, and 53.451. In addition, at least 6 semester hours in a discipline to which mathematics is traditionally applied (as approved by the ad-

viser). Courses 53.311 and 56.305 may not be counted as requirements for the major.

Required Courses for Bachelor of Science in Mathematics

Mathematics 53.125, 53.126, 53.185, 53.225, 53.226, 53.241, 53.310, 53.314; Physics 54.211, 54.212; Computer Science courses 56.122 and at least one 3-semester-hours computer science course numbered 56.122 or above.

At least three 3-semester-hours mathematics courses at the 300 level or above including one from the classical core (see above). A 9-semester-hours concentration in a special interest area within mathematics or in a related discipline; areas of concentration available upon request.

Courses 53.311 and 56.305 may not be counted as requirements for the major.

Minor in Mathematics

The program requires 21 hours of mathematics courses. Required courses are 53.125, 53.126, 53.185, 53.225 and at least two courses (6 semester hours) chosen from the following list: 53.231, 53.225, 53.310, 53.314, 53.322, 53.331, 53.341, 53.360, 53.361, 53.381, 53.421, 53.422 and 53.451. The quality point average of all courses applied to the minor in Mathematics must be at least 2.00 based on a 4.00 system.

Minor in Statistics

This program requires 18 semester hours of credit, at least 15 of which must be in the Department of Mathematics and Computer Science. Students within the Department of Mathematics and Computer Science may apply the following courses toward the minor: 53.341, 53.342, 53.343, 53.461, 53.462, 53.491 and one course related to applications of statistics from other departments, with approval of adviser.

Students from departments other than mathematics and computer science may apply the following courses to the minor: 53.241 and courses listed above for students with the Department of Mathematics and Computer Science; or select courses from the following list (*select one of*): 53.141, 45.260, 48.160, 40.346, 53.123, or 53.125, 53.342, 53.343, 53.491, 53.492. Courses outside the department recommended for the minor are 40.137, 40.400, 40.446, 48.464, 50.351, 82.306, 45.466.

Mathematics Code 53)

53.101 Mathematical Thinking (3) — Presents

mathematical topics and applications in a context designed to promote quantitative reasoning and the use of mathematics in solving problems and making decisions. Suitable for majors in humanities, education, and others seeking a broad view of mathematics. *No background in algebra required.*

53.111 Finite Mathematics (3) — Presents an introductory development of counting techniques, probability spaces, and game theory. Prerequisite: two years of high school algebra or equivalent

53.112 Trigonometry (3) — Studies elementary algebraic functions and relations, exponential, and logarithmic functions, circular functions, and inverse functions, and their applications. Prerequisite: 53.114 or two years of high school algebra or high school trigonometry or their equivalent

53.113 Pre-Calculus (3) — Studies elementary algebraic functions and relations, exponential, and logarithmic functions, circular functions and inverse functions, and their applications. Prerequisite: 53.114 or two years of high school algebra or the equivalent.

53.114 College Algebra (3) — Studies fundamental algebraic concepts and develops the mathematical and computation skills necessary to apply algebraic techniques to problems in business, economics, the social and natural sciences, and the liberal arts. Prerequisite: 1 1/2 years of high school algebra or the equivalent. Not open to students with credit for 53.112 or higher

53.118 Applied Matrix Algebra (3) — Introduces vectors, matrices, linear equations, and linear programming with applications to the social and biological sciences and business. Prerequisite: two years of high school algebra or equivalent

53.123 Essentials of Calculus (3) — Presents the basic concepts of elementary calculus in a nonrigorous approach for students who are not mathematics majors. Pertinent topics in the real number system, analytic geometry, functions, and limits prepare the student for the study of the basic techniques of applications of differentiation and integration. Course is not for chemistry, mathematics or physics majors. Prerequisite: At least two years of high school algebra, or 53.114 or consent of the instructor.

53.124 Essentials of Calculus II (3) — Techniques and applications of integration with an introduction to infinite series and elementary differential equations as a continuation of

53.123. Course is not for mathematics, chemistry, or physics majors. Prerequisite: 53.123 or consent of the instructor.

53.125 Analysis I (3) — Designed to meet part of the major-level mathematics requirement; first in the sequence of four calculus courses. Provides the basic tools for differentiation and the beginnings of integration for functions of a single variable. Prerequisite: four years of high school mathematics including a year of elementary functions or equivalent of 53.113. TI-85 graphical calculator is required.

53.126 Analysis II (3) — Studies techniques of integration, functions, infinite series, Taylor's theorem, some special differential equations, and polar coordinates. Prerequisite: 53.125. TI-85 graphical calculator is required

53.141 Introduction to Statistics (3) — Presents the concepts necessary to use and understand basic statistical techniques. Topics include: descriptive statistics, probability, random variables, sampling distributions, hypothesis tests, confidence intervals, and analysis of variance. Prerequisite: High school algebra

53.185 Discrete Mathematics (3) — An introduction to set theory, logic, combinatorics, and graph theory for those interested in mathematics or computer science. Not usually taken during the freshman year. Prerequisite: 53.125 or consent of instructor

53.201 Theory of Arithmetic (3) — Presents the language of sets, the four elementary operations through the real number system, and the elementary theory of numbers. Course is open only to majors in elementary education, special education or communication disorders.

53.202 Geometry and LOGO for Elementary Teachers (3) — Presents the content of geometry for the elementary curriculum using geometric models, inductive reasoning, and the LOGO computer language. Course is open only to majors in elementary education, special education or communication disorders. Prerequisite: Sophomore status or above or consent of the instructor

53.225 Analysis III (3) — Presents infinite sequences and series, power series, Taylor and Maclaurin series, three dimensional vector analysis, and partial derivatives. Prerequisite: 53.126

53.226 Analysis IV (3) — Presents an introduction to the differentiation and integration of real valued functions of several variables. Pre-

sents curves and parametric equations, surfaces, Taylor's, Stoke's, and Green's theorems, functions between Euclidean spaces, and multiple integrals. *Prerequisite: 53.225*

53.231 College Geometry (3) — Presents elementary geometry from an advanced standpoint. Discusses incidence in the plane and in space, congruence, inequality, and similarity concepts. Studies properties of circles, polygons, and spheres. *Prerequisite: High school geometry, 53.185*

53.241 Probability and Statistics (3) — Calculus-based study of probability and statistics. Topics covered include: descriptive statistics, probability, discrete and continuous random variables, common distributions, sampling distributions, estimation procedures, and inferential statistics. A more rigorous course than 53.141. *Prerequisites: 53.126 (or concurrent) and 53.185*

53.243 Nonparametrics Statistics (3) — Presents standard nonparametric statistical procedures. After a brief review of hypothesis testing fundamentals, topics such as goodness-of-fit tests, one and two-sample procedures for location parameter, tests of randomness, and association analysis are covered. *Prerequisites: 53.123 or 53.125 and 53.141 or the equivalent*

53.310 Introduction to Abstract Algebra (3) — Provides an introduction to the language and methods of abstract mathematics. Subjects include sets, relations, rings, functions, groups, and fields. *Prerequisites: 53.185 and 53.225*

53.311 Algebra for Secondary School Teachers (Fall/even-numbered years) (3) — Presents topics of elementary algebra from an advanced viewpoint. Considers topics of contemporary school mathematics programs. Intended for students in secondary education majoring in mathematics. *Prerequisite: 53.310*

53.314 Linear Algebra (3) — Studies abstract vector spaces, linear transformation, matrices, determinants, inner product spaces, and related topics. *Prerequisites: 53.185 and 53.225*

53.322 Differential Equations (3) — Studies elementary ordinary differential equations, infinite series and power series solution, some numerical methods of solution, and LaPlace transforms. *Prerequisite: 53.225*

53.331 Modern Geometry (Spring/odd-numbered years) (3) — Presents non-Euclidean geometries and their development from postulate systems and a formal approach to projective ge-

ometry. *Prerequisite: 53.231*

53.341 Statistical Methods (Fall, even-numbered years) (3) — Presents common statistical techniques with emphasis on applications. Topics include: confidence intervals, hypothesis test, regression analysis, and analysis of variance. Strongly encourages use of statistical software, especially SAS. *Prerequisite: 53.141 or 53.241 or consent of the instructor*

53.342 Design and Analysis of Experiments (Spring, odd-numbered years) (3) — Basic experimental statistics including methods of estimation and hypothesis testing, analysis-of-variance procedures, principles of experimental design, completely randomized and randomized complete block designs, factorial arrangements of treatments, linear regression and correlation analysis, covariance analysis and distribution-free methods. *Prerequisite: 53.141 or 53.241 or consent of the instructor*

53.343 Applied Regression Analysis (Fall, odd-numbered years) (3) — A basic course in multiple linear regression methods including weighted least squares, stepwise regression, residual analysis, and applications to mathematical models. Treats problems which involve the use of computing equipment. *Prerequisite: 53.141 or 53.241 or consent of the instructor*

53.360 Number Theory (3) — Presents the theory of numbers. Includes the topics of Euclidean algorithm, congruences, continued fractions, Gaussian integers, and Diophantine equations. *Prerequisites: 53.185 and 53.225*

53.361 Coding and Signal Processing (Fall) (3) — A mathematical approach to codes and ciphers. Includes security codes, coding for efficiency in computer storage, error-correcting codes. Signal processing, including the Fourier transform and digital filters. Individual projects required. *Prerequisites: 53.126 and 56.116 or 56.122*

53.373 Numerical Methods in Computing (Fall) (3) — Analysis and application of various methods of numerically solving problems in the areas of nonlinear equations; systems of equations, interpolation, and polynomial approximation; numerical integration; approximation theory; and differential equations. Students design and execute algorithms on the computer for specific numerical procedures. *Prerequisites: 56.116 or 56.121, Mathematics 53.126*

53.374 Introduction to Discrete Systems Simulation (Spring/odd-numbered years) (3) — Studies the ways that systems can be modeled for

computer solution. Emphasizes stochastic behavior by discrete random processes and the simulation tools for their solution. *Prerequisites: One course each in calculus, programming, and statistics*

53.381 Introduction to Operations Research (*Fall/odd-numbered years*) (3) — A survey of the methods and models used in applying mathematics to problems of business. Topics drawn from decision making, linear, and dynamic programming, networks, inventory models, Markov processes, and queuing theory. *Prerequisites: 53.118 and 53.123 or 53.225*

53.411 Introduction to Group Theory (*Alternate years*) (3) — Study of theorems and applications of group theory begun in abstract algebra continued. *Prerequisite: 53.310*

53.421 Advanced Calculus (*Fall/even-numbered years*) (3) — Presents a rigorous treatment of the concepts of limit, continuity, derivative, and integral for functions of a single real variable. *Prerequisites: 53.226, consent of instructor*

53.422 Complex Variables (*Fall/odd-numbered years*) (3) — Presents a rigorous treatment of the complex numbers and theory of functions of a complex variable, limits, continuity, analytic functions, Cauchy-Riemann equations, contour integrals, conformal mappings, and applications. *Prerequisites: 53.226, consent of instructor*

53.451 Introduction to Topology (*Alternate years*) (3) — Introduces fundamentals of general topology; elementary set theory, topological spaces, mappings, connectedness, compactness, completeness, product and metric spaces; nets and convergence. *Prerequisites: 53.226, consent of instructor*

53.461 Probability Models and Applications (*Spring, even-numbered years*) (3) — An introduction to elementary stochastic processes and their applications to various phenomena in engineering, management science, the physical and social sciences, and operations research. *Prerequisite: 53.241*

53.462 Introduction to Mathematical Statistics (*Fall, even-numbered years*) (3) — An introductory study of mathematical statistics including distributions of functions of random variables, interval estimation, statistical hypotheses, analysis of variance, and the multivariate normal

distribution. *Prerequisite: 53.241*

53.471 Numerical Analysis (*Spring/even numbered years*) (3) — Provides a computer-oriented analysis of algorithms of numerical analysis. Includes the topics of non-linear equations, interpolation and approximation, differentiation and integration, matrices and differential equations. *Prerequisite: 53.322 and 53.373*

53.472 Matrix Computation (*Spring/odd numbered years*) (3) — Presents a computer-oriented analysis of matrices. Includes Gaussian reduction, LDU factorization, special reduction techniques for tridiagonal matrices, iterative methods, and a study of the matrix eigenvalue problem. *Prerequisites: 53.225 and 53.373*

53.491 Special Topics in Mathematics (3) — Presents an area of mathematics which is not available as a regular course offering. *Prerequisite: Consent of the instructor*

53.492 Independent Study in Mathematics (1-3) — Provides for directed study of a particular area of mathematics as mutually agreed upon by the student and the instructor. Emphasizes individual scholarly activity of the highly motivated student.

53.493 Honors in Independent Study in Mathematics (3) — For students who have demonstrated a high level of interest and ability in mathematics and have mastered the required course work. Students investigate research problems selected under the supervision of a faculty member of the Department of Mathematics and Computer Science. *Prerequisite: Admission to the Honors Program in natural sciences and mathematics*

53.497 Internship in Mathematics (2-12) — Provides mathematics majors with an opportunity to acquire meaningful and professional on-site training and learning experiences in mathematics at an industrial, private or business workplace. *Note: a student may, with departmental approval, apply a maximum of 3 credits of internship toward the fulfillment of the mathematics major. Each academic credit requires 40 hours of supervised work and the limit is 12 total semester hours for internships. Prerequisites: students must establish adequate course preparation for the proposed internship. Internship applications must be submitted one month before the internship begins and must be approved by the department chairperson*

Medical Technology

Program Coordinator

James E. Cole, professor, Department of Biological and Allied Health Sciences

Advisers

Judith P. Downing, professor, Department of Biological and Allied Health Sciences

Judith A. Kipe-Nolt, assistant professor, Department of Biological and Allied Health Sciences

James E. Parsons, associate professor, Department of Biological and Allied Health Sciences

Degree Program

Bachelor of Science

A minimum of 96 semester hours and 32 clinical hours are required for a major in medical technology.

Goals and Objectives

The programs in allied health sciences encompass those health areas in which individuals support, aid, and increase the efficiency and effectiveness of other health professionals by becoming a contributing member of a health care team. Programs in this area combine natural science and liberal arts education with clinical instruction. In general, students who complete any of the programs may enter their professions immediately. Others may select post-graduate education in health care. Central to most allied health programs, especially the clinical portion, is satisfactory completion of the clinical standards, often referred to as the Essentials. These standards establish requirements related to curriculum, personnel, financing, resources, and records.

Program of Study

The medical technology program consists of a minimum of 96 semester hours of coursework prescribed by the university, followed by one calendar year of clinical education in a medical technology program accredited nationally by the Committee on Allied Health Education and Accreditation (CAHEA) of the American Medical Association (AMA) through the National Accrediting Agency for Clinical

Laboratory Sciences (NAACLS).

Students enrolling in the curriculum leading to the Bachelor of Science will be admitted under the same policy governing other applicants to Bloomsburg University. These requirements may be found under the section on Admission. Assistance with the admission application to the clinical year phase is offered by the university, but admission to that phase, as well as fees, are determined solely by the institution where the clinical work is done. The university cannot guarantee that a student will be accepted for the clinical education portion of the program. In general, students with the highest academic achievement, who interview well, and have a history of volunteer work are given priority.

Students who successfully complete all of the requirements and the clinical year earn a Bachelor of Science degree. All clinical year graduates become eligible to take the two certification examinations for medical technologists. Upon successfully completing one or both of these examinations, the student is awarded a certificate of registry and the designation Medical Technologist (M.T.) (ASCP) or Clinical Laboratory Scientists (C.L.S.) (NCA).

A student who fails to gain admission to a clinical program at the end of the junior year (3+1 program) or wishes to complete a degree prior to entering the clinical experience may remain at the university and complete the requirements for a baccalaureate degree. Ordinarily, a student can complete the degree requirements for a Bachelor of Arts in biology in one additional year; other curricula may demand more time. Many students in the medical technology program select an option in microbiology. This option is detailed in the section on Biology.

Professional Education Courses

Biological and Allied Health Sciences 50.107, 50.110 or 50.120, 50.242, 50.271, 50.342, 50.343, 50.233 or 50.332, 50.371 or 50.472; Chemistry 52.115, 52.131, 52.216 and 52.341 or 52.216 and 52.232; Physics 54.107; Mathematics 53.141; and Computer Science 56.110.

Clinical Experience

A total of 32 semester hours must be earned from the Code 86 listing of courses in medical technology (see below) that are given at the clinical site.

Elective Courses

Students must select additional courses to complete the minimum program requirement of 96 semester hours. The following courses are recommended as electives: Biological and Allied Health Sciences 50.282, 50.364, 50.442, 50.455, 50.471, and 50.483.

Adjunct Faculty

Abington Memorial Hospital, Abington, Pa.
 Paul J. Cherney, M.D., Medical Adviser
 Barbara J. Scheelje, M.T. (ASCP),
 Program Director
 The Bryn Mawr Hospital, Bryn Mawr, Pa.
 Albert Keshgagian, M.D., Ph.D., Medical
 Adviser
 Nancy M.G. Calder, M.Ed., M.T. (ASCP),
 Program Director
 Divine Providence Hospital, Williamsport, Pa.
 Galal M. Ahmed, M.D., Medical Adviser
 Loretta A. Moffatt, M.T. (ASCP), Program
 Director
 Geisinger Medical Center, Danville, Pa.
 John J. Moran, M.D., Medical Adviser
 Alvin Swartzentruber, M.T. (ASCP),
 Program Director
 Lancaster General Hospital, Lancaster, Pa.
 Gerald R. Fahs, M.D., Medical Adviser
 Nadine E. Gladfelter, M.T. (ASCP),
 Program Director
 Nazareth Hospital, Philadelphia, Pa.
 William J. Warren, M.D., Medical Adviser
 Diane P. Bejsiuk, M.Ed., M.T. (ASCP)
 ,Program Director
 Polyclinic Medical Center of Harrisburg, Harrisburg, Pa.
 Julian W. Potok, D.O., Medical Adviser
 Marcy Anderson, M.S., M.T. (ASCP),
 Program Director
 The Reading Hospital and Medical Center,
 Reading, Pa.
 I. Donald Stuard, M.D., Medical Adviser
 Sharon K. Strauss, M.T., (ASCP), CLS
 (NCA), Program Director
 Robert Packer Hospital, Sayre, Pa.
 Joseph J. King, M.D., Medical Adviser
 Brian D. Spezialetti, M.S., M.T. (ASCP),
 Program Director

Medical College Hospital, Elkins Park, Pa.

Vivan Anagnoste, M.D., Medical Adviser
 Phyllis Gotkin, Ph.D., M.T. (ASCP),
 Program Director

Sacred Heart Hospital, Allentown, Pa.
 Francis V. Kostelnik, M.D., Medical
 Adviser

Deborah Schwab, M.T. (ASCP), C.L.S.
 (NCA), Program Director

Scranton Medical Technology Consortium,
 Scranton, Pa.

Thomas V. DiSilvo, M.D., Medical Adviser
 Mary Gene Butler, M.S., M.T. (ASCP),
 Program Director

University of Virginia Medical Center, Charlottesville, Va.

M.R. Wills, M.D., Medical Adviser
 Cheryl V. Leitch, M.T. (ASCP), S.H.
 (ASCP), Program Director

Wilkes-Barre Hospital, Wilkes-Barre, Pa.
 C. Warren Koehl Jr., M.D., Medical
 Adviser

Helen M. Ruane, M.T. (ASCP), Program
 Director

York Hospital, York, Pa.

John P. Whiteley, M.D., Medical Adviser
 Brenda L. Kile, M.A., M.T. (ASCP),
 Program Director

Medical Technology (Code 86)

86.401 Clinical Microbiology (6-10) — A lecture and laboratory study of bacteria, fungi, parasites, and viruses which cause disease in humans, their clinical pathology, and related diagnostic laboratory procedures.

86.402 Clinical Hematology/ Coagulation (6-10) — A lecture and laboratory study of hematopoiesis and blood coagulation. Students acquire an understanding of the theory of hematological tests, skills in the performance of these tests, knowledge of blood disorders, and insight into the significance of test results.

86.403 Clinical Chemistry for Medical Technologists (6-10) — Lecture and laboratory study of enzymes, carbohydrates, lipids, proteins, nitrogenous end products, electrolytes, acid-base balance, body fluids, toxicology, endocrinology, and urinalysis. Lecture series includes anatomy, physiology, methods of analysis, and clinical significance of each biochemical determination. Laboratory study includes

standardization and quality control of procedures using spectrophotometry, chromatography, electrophoresis, and automated techniques.

86.404 Clinical Immunohematology (3-6) — Lecture and laboratory study of blood groups, genetics, antigens, and antibodies and their interaction as related to safe transfusion, prediction of immune incompatibilities, and probability of parentage. Donor collection, processing, blood component preparation, and ther-

apy also studied.

86.405 Clinical Immunology/Serology (2-4) — Lecture and laboratory study of immunological concepts and theory and their relation to serologic reactions and clinical interpretations.

86.406 Clinical Seminar (1-6) — Covers courses not included above, such as orientation, laboratory management, education, clinical microscopy and/or areas unique to the individual hospital program.

Aerospace Studies/Air Force ROTC

Co-adjutant Instructors in Aerospace Studies

Lt. Col. David A. Agee, chairperson
Capt. Steven S. Manley
Capt. L. Douglas Werder

Bloomsburg University participates with Wilkes University in a cross-enrollment program which allows students to earn commissions as officers in the U.S. Air Force while pursuing a university degree. Courses are taught on the Wilkes University campus in Wilkes-Barre, Pennsylvania, about a one-hour drive from Bloomsburg.

The Air Force Reserve Officer Training Corps (AFROTC) program provides both a four-year and two-year program. The first two years of the four-year program are called the General Military Course (GMC). The last two years of the four-year program are the same as the two-year program and are called the Professional Officer Course (POC). Students may enroll in either the two or four-year program to earn commissions.

GMC courses are open to any university student. However, students may apply for acceptance into the POC, usually in their sophomore year. To enter the POC, students must pass a physical examination, an officer qualification test, meet certain academic standards, and complete a four-week (or six-week, if enrolled in the two-year program) field training encampment, normally prior to their junior year. Applicants for the two-year program must start the application process as early as possible in their sophomore year.

All AFROTC cadets are eligible to compete for one, two or three-year Air Force scholarships generally valued from \$2,000 to \$8,000 a year. All POC cadets are eligible to apply for at least a \$2,000 per year scholarship, regardless of academic major.

Uniforms, equipment, and textbooks for the AFROTC work are supplied by Wilkes University and the U.S. Air Force. Students in the POC receive a \$100 per month allowance.

Students who successfully complete the POC are commissioned as second lieutenants

in the U.S. Air Force and will serve on active duty in a career speciality they have chosen, consistent with USAF needs. Qualified students may compete for duty as pilots, navigators, nurses, engineers, missile or space operations, meteorologists, computer analysts, lawyers, security police or other career areas.

Four semester hours of credit may be earned in the GMC, 12 semester hours in the POC, and up to six in the field training program.

The field training required before entry into the POC is held at several operational bases each summer. Cadets have an opportunity to observe Air Force units and people at work and at home; participate in marksmanship, survival, athletics, and leadership training activities; experience orientation flights; and work with contemporaries from other colleges and universities. Transportation to and from the legal residence of the cadet to the field training base, food, lodging, medical, and dental care are provided by the Air Force. The cadet receives approximately \$400 for the four-week field training program or \$600 for the six-week program.

The optional Advanced Training Program allows POC members to visit a USAF base for two weeks during the summer between the cadet's junior and senior years and to work with an active duty officer in the student's chosen career area. The participating cadet is provided a weekly salary during the program.

For information, call the Aerospace Studies Department at Wilkes University at 1-800-WILKES-U, ext. 4860/4861 or write P.O. Box 111, Wilkes-Barre, PA 18766. For registration information, contact the Bloomsburg University Registrar's Office.

Aerospace Studies (Code 61)

General Military Courses

The general military courses (GMC) constitute a two-year program for freshmen and sophomores and are designed to provide general knowledge of the role, organization, missions, and historical development of U.S. Air Power. Students enrolled in the GMC, who are

not on Air Force scholarships, incur no military obligations.

61.110 Air Force Today I (1) — Presents background, missions, and functions of U.S. military forces with emphasis on U.S. Air Force organization, doctrine, and strategic forces. Develops individual communication skills.

61.120 Air Force Today II (1) — Reviews U.S. general purpose military forces, insurgency and counter-insurgency, aerospace support forces, and organizations. Develops individual communication skills.

61.151 Leadership Laboratory (0) — Involves a progression of experience designed to develop each student's leadership potential in a supervised training laboratory. Examines Air Force customs and courtesies, drill and ceremonies, career opportunities, and life and work of an Air Force junior officer.

61.210 The Development of Air Power I (1) — Reviews air power development in historical perspective through the end of World War II including mission, concepts, doctrine, and employment evolution with emphasis on changes in conflict and technological development. Develops individual communications skills.

61.220 The Development of Air Power II (1) — Addresses air power development from the end of World War II to the present; changing missions and employment of air power in support of national objectives. Develops individual communications skills.

61.230 Basic ROTC Field Training (1-4) — Includes leadership training, survival training, and fitness training. Offered after successful completion of freshman and sophomore courses and by consent of the instructor.

Professional Officers Courses

The Professional Officer Courses (POC) constitute a four-semester program, normally taken during a student's junior and senior years, leading to commissioning as an Air Force officer. The POC concentrates on concepts and

practices of management and leadership, national defense policy, and communication skills.

61.310 Concepts of Management (3) — Outlines general theory and practice of management with special reference to the Air Force. The evolution of management thought including classical, behavioral, and management science schools, study of information systems, quantitative approach to decision making, policy formulation, principles and practices in planning, organizing, staffing, directing, and controlling business and Air Force activities, resource control techniques, social and ethical issues within the management process, and development of communication skills.

61.320 Concepts of Leadership (3) — Studies Air Force leadership at the junior officer level, including its theoretical, professional, and legal aspects. Provides practical experience in influencing people, individually and in groups, to accomplish organizational missions effectively. Develops communication skills.

61.330 Advanced ROTC Camp (1-6) — Includes leadership training, survival training, and fitness training. Offered in lieu of the freshman and sophomore courses for transfer students and other students who enter the program at the junior level.

61.410 National Security Forces in American Society I (3) — Examines the role and functions of the professional military officer in a democratic society and civil-military interaction; basic framework of defense policy and formulation of defense strategy; impact of East Asia, Latin America, Africa, the Middle East, and the Soviet Union on U.S. national security police. Develops individual communications skills.

61.421 National Security Forces in American Society II (3) — Studies the problems of developing defense strategy in a rapidly changing technological environment; effective deterrent posture and management of conflict; dynamics and agencies of defense policy making

Army ROTC

Co-adjunct Instructors in Military Science

Maj. Steve Lavin, Assistant Professor of Military Science

MSG Richard Maloney, Senior Instructor

MSG Jack Handel, Instructor

SFC Tommy Lovett, Instructor

Bloomsburg University students can qualify for a commission in the U.S. Army, Army Reserve, or National Guard through the on-campus Reserve Officers' Training (ROTC) program while simultaneously pursuing a degree. Students take the first two years of the ROTC incurring no military obligation. Opportunities also exist for attending Airborne, Air Assault, and Northern Warfare Schools.

Army ROTC provides a four-year curriculum open to both men and women regardless of academic major or area of study. All equipment, clothing and books are provided free of charge. The program is divided into two parts, the Basic Course and the Advanced Course. The Basic Course consists of four courses given during the freshman and sophomore years. During this period, classes include such subjects as military history and organization, traditions, leadership development, time management and adventure training.

The Advanced Course consists of four courses given during the junior and senior years. This portion of the curriculum concentrates on practical application of leadership skills such as tactics, training, ethics, and continued leadership development.

Students receive academic credit for all ROTC courses. The basic program does not require the student to make any commitment to the U.S. Army and allows the student to develop an understanding of the role of the commissioned officer within the Army. Coursework provides training in leadership and management skills which help the individual develop the ability to communicate effectively, think analytically, and make independent and responsible decisions.

Two, three, and four year academic scholarships are available. Benefits include full tuition and fees, a flat fee for books, and \$150 a

month during the academic year. Students enrolled in the advanced program also receive the \$150 a month regardless of whether or not they were awarded a scholarship. During the summer between the junior and senior year, students attend a six-week camp where they are paid at a rate equal to half the basic pay of a second lieutenant.

Veterans can receive constructive credit for the first two years of ROTC and are eligible to enter directly into the Advanced Course. There are a variety of options available to qualify students for the Advanced Course who did not take ROTC their first two years. Students belonging to the Army Reserve or National Guard are also eligible for the Simultaneous Membership Program.

Army ROTC also offers a ranger team for students who wish to gain more experience in outdoor activities such as orienteering and survival skills.

Students who successfully complete the ROTC curriculum receive a commission as a Second Lieutenant in the U.S. Army, Army Reserve, or National Guard. Time served on active duty varies, dependent upon the type of program the student elects. Students can be guaranteed Reserve or National Guard duty if they desire.

For more information about the ROTC program, call 389-2123 or 389-2523.

Military Science (Code 67)

Basic Course — Freshman and Sophomore Years

67.110 Introduction to Military Science (1) — Provides an overview of the organization of the ROTC program. Introduces skills such as rappelling, marksmanship, military customs, preparing military correspondence, and practical field training. *One 75-minute class per week, 6 evening laboratories per semester

67.120 Introduction to Military Issues (1) — Provides a background in basic skills essential to leaders. Skills may include marksmanship, tactical movement, first aid, and communica-

ion skills. *One 75-minute class per week, 6 evening laboratories per semester

7.210 Applied Leadership and Management

(1) — Provides an overview of the Army rank structure and a specific survey of the junior officer's duties and responsibilities within that rank structure. Practical training consists primarily of advanced land navigation skills as well as rappelling and practical field training. *One 75-minute class per week, 7 evening laboratories per semester

7.220 Applied Leadership and Management I

(1) — Presents the fundamentals of small unit leadership and mission planning techniques, to include the reverse planning process and problem-solving techniques. Students learn through case studies how to evaluate different leadership styles and techniques. *One 75-minute class per week, 6 evening laboratories per semester

7.230 ROTC Basic Camp (4)

Sophomore summer semester course offered in lieu of the Basic Course for students who want to enter the Advanced Program. The camp is six weeks in duration and students are paid at the rate of half the basic pay for a second lieutenant.

**Note: Leadership laboratories consist of adventure/survival training, land navigation, first aid, and dismounted drill exercises which cannot be conducted in the classroom.*

Advanced Course — Junior and Senior Years

7.310 Advanced Military Science I (3)

Provides a detailed study of the leadership techniques and the principles introduced in 77.220. Course places students in role model situations

to provide first-hand experience in problems of small unit leadership. **One 3-hour class per week, seven laboratories per semester

67.320 Theory and Dynamics of the Military Team (3)

— Practical application of the skills learned in 67.310. Students learn how to apply planning and management skills properly in conjunction with small unit tactics. **One 3-hour class per week, six laboratories per semester

67.330 ROTC Advanced Camp (6)

— A six-week practical application and evaluation phase required of each cadet prior to commissioning. Advanced camp places cadets in leadership positions where they must put into practice the techniques learned on campus in both tactical and nontactical situations.

67.410 Advanced Leadership and Management I (3)

— Presents advanced leadership and management skills required of a manager in a military environment. Students perform roles in management of a military organization using skills in administration, training, conduct of meetings, briefings, and logistics.

67.420 Advanced Leadership and Management II (3)

— Acquaints students through a series of case studies and role playing simulations with the high ethical standards required of a manager and leader. Students learn the basic procedures of military law and their application in a military environment. Students continue to perform roles in management of a military organization, using skills developed in prior military science courses. **One 3-hour class per week, six laboratories per semester

***Note: Students gain further practical leadership training during the leadership laboratories while performing in leadership positions and conducting training.*

Department of Music

Faculty

- Stephen C. Wallace, Chairperson, Professor — B.S., Mansfield State College; M.M., University of Michigan; D.Ed., The Pennsylvania State University
- John H. Couch, Associate Professor — A.R.C.T., Royal Conservatory of Music; M.M., Indiana University School of Music; D.M.A., Catholic University
- Mark R. Jelinek, Associate Professor — B.M.E., M.A., Eastern New Mexico University; D.M.A., Arizona State University
- Wendy L. Miller, Associate Professor — B.S., Bluffton College; M.M., D.Mus., Indiana University
- B. Eric Nelson, Associate Professor — B.M., Houghton College; M.M. Westminster Choir College; D.Mus., Indiana University
- Terry A. Oxley, Associate Professor — B.M.E., University of Wisconsin, Eau Claire; M.M.E., University of Wisconsin, Steven's Point; D.A., University of Northern Colorado
- W. Ann Stokes, Assistant Professor — B.Mus., M.Mus., University of North Carolina-Greensboro; Ph.D., Northwestern University

Degree Program

Bachelor of Arts in Music

A total of 44 to 60 semester hours is required for a major in music.

Goals and Objectives

The goals of the Department of Music are to provide a balanced and diverse program of quality music activities, to provide a student-generated music performance element for the entire university community, and to achieve better understanding of the art of music and the principles guiding effective education in music. This goal is supported by a number of course offerings (classroom music courses in appreciation, skill development, music history, style and repertoire, harmony and application), maintenance of seven prominent performance ensembles appearing regularly on campus and through tours, and opportunities to study voice, piano, organ, and the standard orchestral string and wind instruments on a

weekly private lesson basis. In addition, opportunities exist for solo work, recitals, and leadership roles.

Program offerings include: a Bachelor of Arts in Music — a liberal arts-oriented preparation for studio teaching and postbaccalaureate study; a choice of audio recording, performance or music history specializations; a minor in music — a 22-semester hour program packaged according to seven specialty areas in music; a music concentration for education majors; and certificate programs either in music (22 semester hours) or theater-music (18 semester hours). Selection of either the music major or minor program is highly encouraged in the freshman year.

Prospective performance music majors must audition by cassette or in person before acceptance as a music major into the applied music (performance) specialization.

A maximum of 6 semester hours may be earned in seven ensembles: Maroon and Gold Band, Concert Choir, Women's Choral Ensemble, University-Community Orchestra, Husky Singers, Studio Band, and Chamber Singers. Enrollment in an ensemble is based on invitation or successful audition. The ensembles are described as courses 35.106 through 35.112.

Private lessons in voice, organ, piano, strings, woodwinds, brass, and percussion are available to qualified students. Eight semester hours of private instruction may be earned in eight fall/spring semesters, 16 semester hours for music majors. (For voice, contact Drs. Nelson or Miller; for organ, Nelson; for piano, Couch; for class piano, Stokes or Couch; for woodwinds and percussion, Oxley; for brass, Wallace; and for strings, Jelinek and Stokes.)

Each performance ensemble carries both a lower division and an upper division course number; the latter indicates enrollment from the fourth semester of participation. The upper division course number is always a 300 level number. Similarly each applied studio instruction (private lesson) carries two division course numbers, the upper division number indicating enrollment from the third semester of study.

A limited number of music scholarships are available.

Required Courses and Options

Required courses include: 35.101, 35.201, 35.202, 35.210, 35.211, 35.301, 35.321, 35.322, 35.410, and 35.411; demonstration of piano proficiency by examination and/or election of 35.302; 6 semesters (4 semester hours) of ensemble; and one of the following options:

Music History and Literature - 16 semester hours: 35.430, 35.431, and 9 semester hours through courses 35.324, 35.325, and 35.327; also 4 semester hours of applied instrument or voice study.

Applied Music (Performance) - 16 semester hours: one instrument or voice for 8 semesters. Selection of voice as the applied music area requires 16 semester hours in language courses: 16.109 Language for Singing, French 10.101 and 10.102 (two levels from 10.100), German 11.100, 11.101 and 11.102; and Italian 14.100 or 14.101.

Audio—Video Recording — 44 semester hours: harmony/theory for 11 semester hours, ear/perception/style for 11 semester hours, applied piano for 4 semester hours, applied performance ensemble for 4 semester hours, applied voice or instrument for 3 semester hours, recording specialization (internships) for 11 semester hours.

Early acceptance as a music major is necessary to complete the program in eight semesters.

Minor in Music

The minor provides an emphasis in areas designated applied voice, applied instrumental music, applied keyboard, music history – literature, theory (harmony and application), music skills (general music development), and audio recording techniques.

The minor in music is a 22-semester hour emphasis that may be selected by students who major in a program other than the Bachelor of Arts in Music. The minor, which may be completed in 8 or fewer semesters, is built from Code 35 courses that include music theory, ear training, music history and style, applied study, and performing ensembles.

Career Concentration

The audio recording techniques career concentration is a cross-discipline vocational preparation, available through the Department of Music in cooperation with the departments of mass communications and physics and private business. Internships are required.

Music (Code 35)

Courses are offered each semester unless otherwise noted.

35.101 Music Listening (3) — Provides an approach to music listening through study of basic vocal and instrumental styles. Analysis of various masterpieces, composers, and musical forms. Requires no previous musical experience. Recommended first-course in non-applied music.

35.103 Fundamental Musicianship (Spring) (3) — Explores personal music understanding and development through elementary terminology, symbols, theory, music reading, singing, playing, and chording of simple instruments and bodily movement to music. Suggested for students with little musical background as preparation for applied study and courses 35.201, 35.210, and 35.320. Recommended first-course in applied music.

35.106/ 35.306 Maroon and Gold Band (0-1) — Performs music of varied styles and periods. Marching band each fall, concert band each spring. Requires 5 hours per week each fall and 4 hours per week each spring.

35.107/ 35.307 University-Community Orchestra (0-1) — Performs music appropriate to the symphony orchestra. Requires 3 hours per week. Rehearses Monday evenings. Election for wind and percussion players requires permission of the instructor.

35.108/ 35.308 Concert Choir (0-1) — Performs choral music of varied styles and periods. Membership by audition only. Requires 4 hours per week.

35.109/ 35.309 Women's Choral Ensemble (0-1) — Performs varied styles from popular to masterworks. Requires 3 hours per week. No audition required.

35.110/ 35.310 Husky Singers (0-1) — Performs varied music for men's chorus. Requires 2 hours per week. No audition required.

35.111/ 35.311 Chamber Singers (0-1) — Performs music of many styles and periods, Renaissance to present. Open to singers from other university vocal ensembles. Requires 3 hours per week. Membership by audition only.

35.112/ 35.312 Studio Band (0-1) — Performs jazz, swing, and other forms representing the big band style. Requires 3 hours per week. Election requires permission of the instructor. Audition may be necessary.

35.201 Sight Singing I (Spring) (1) — Development of the musical ear through progressive training. Elected by music majors or as a single course by non-music majors. Requires 2 hours. *Prerequisites: 35.103, 35.210 or consent of the instructor*

35.202 Sight Singing II (Fall) (1) — Continues musical ear training. Elected by music majors or as a single course by non-music majors. Requires 2 hours. *Prerequisite: 35.201*

35.203 Class Voice (Fall) (2) — Provides group voice instruction for the beginner. Emphasizes fundamental singing techniques and solo performance. Requires 3 hours per week.

35.204 Class Piano I (2) — Provides group piano instruction for the beginner. Emphasizes solo playing, sight-reading, and creative accompaniment. Requires 3 hours per week. Limited seating.

35.205 Class Piano II (Spring) (2) — Develops independence in solo playing and accompanying. Continuation of 35.204 or students with demonstrated abilities. Requires 3 hours per week. *Consent of instructor*

35.206 Class Strings (2) — Provides learning of fundamental string skills and information related to string instruments. Requires 3 hours per week. *Prerequisite: 35.103 or consent of instructor*

35.207 Class Brass (Fall/even-numbered years) (2) — Provides group brass instruction for the beginner or the brass player who wishes to double. Emphasizes fundamental technique and elementary performance. Requires two hours per week. *Prerequisite: 35.103 or consent of instructor*

35.210 Music Theory I (Fall) (3) — Studies harmony, voice leading, and written harmonization. Requires 3 hours per week. *Prerequisite: 35.103 or consent of instructor*

35.211 Music Theory II (Spring) (3) — Continues Music Theory I with the study of seventh chords and common-chord and chromatic modulations. Includes melodic and rhythmic dictation and keyboard realization. Requires 3 hours per week. *Prerequisite: 35.210*

35.213 / 35.313 Violin (1) — Private instruction for students with demonstrated ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor*

35.214 / 35.314 Viola (1) — Private instruction for students with ability or potential. One-half hour per week. May be repeated at one semes-

ter hour each election. *Consent of instructor*.

35.215 / 35.315 Violoncello (1) — Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor*.

35.216 / 35.316 Double Bass (1) — Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor*.

35.217 / 35.317 Organ (1) — Private instruction for those who have previously studied organ or who have strong piano backgrounds. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor*.

35.230 / 35.330 Voice (1) — Private instruction for students with demonstrated vocal abilities. One-half hour per week. May be repeated at 1 semester hour each election. *Prerequisite: 35.203 except music majors and declared music minors*

35.235 / 35.335 Piano (1) — Private instruction for students with previous piano study. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor*.

35.240 / 35.340 Trumpet (1) — Private instructions for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor*.

35.241 / 35.341 Horn (1) — Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor*.

35.242 / 35.342 Trombone (1) — Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor*.

35.243 / 35.343 Baritone (1) — Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor*.

35.244 / 35.344 Tuba (1) — Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor*.

35.251 / 35.351 Flute (1) — Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor*.

hour each election. *Consent of instructor.*

35.252/ 35.352 Oboe (1) — Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor.*

35.253/ 35.353 Clarinet (1) — Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor.*

35.254/ 35.354 Bassoon (1) — Private instruction for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor.*

35.255/ 35.355 Saxophone (1) — Private instruction for students with ability or potential. One-half per week. May be repeated at 1 semester hour each election. *Consent of instructor.*

35.256/ 35.356 Percussion (1) — Private instruction with snare, timpani, and mallets for students with ability or potential. One-half hour per week. May be repeated at 1 semester hour each election. *Consent of instructor.*

35.270/ 35.470 Violin for Music Majors (2) — Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.271/ 35.471 Viola for Music Majors (2) — Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.272/ 35.472 Violoncello for Music Majors (2) — Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.273/ 35.473 Double Bass for Music Majors (2) — Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.274/ 35.474 Organ for Music Majors (2) — Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

a maximum of 16 semester hours.

35.275/ 35.475 Voice for Music Majors (2) — Two weekly half-hour lessons for students electing the applied voice specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.276/ 35.476 Piano for Music Majors (2) — Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.277/ 35.477 Trumpet for Music Majors (2) — Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.278/ 35.478 Horn for Music Majors (2) — Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.279/ 35.479 Trombone for Music Majors (2) — Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.280/ 35.480 Baritone for Music Majors (2) — Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.281/ 35.481 Tuba for Music Majors (2) — Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.282/ 35.482 Flute for Music Majors (2) — Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.283/ 35.483 Oboe for Music Majors (2) — Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

imum of 16 semester hours.

35.284 / 35.484 Clarinet for Music Majors (2)

— Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.285 / 35.485 Bassoon for Music Majors (2)

— Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.286 / 35.486 Saxophone for Music Majors (2)

— Two weekly half-hour lessons for students electing the applied specialization within the Bachelor of Arts in Music program. May be repeated at 2 semester hours each election for a maximum of 16 semester hours.

35.300 Music Theory III (Fall/odd-numbered years) (3) — Continuation of music theory. Includes formal analysis, design, original composition, harmonic dictation, and perception skills. Requires 3 hours per week. *Prerequisite: 35.211*

35.301 Music Theory IV (Spring/even-numbered years) (3) — Continuation of music theory. Reviews 20th century compositional practice. Includes analysis and composition. Requires 3 hours per week. *Prerequisite: 35.211*

35.302 Piano Proficiency (1) — Provides opportunity for majors in music to gain proficiency at the keyboard. May be repeated.

35.303 Seminar in Piano Accompanying (2) — Provides instruction, coaching, systematic score study, and critical performing experience for pianists. Requires 3 hours per week and includes performing. *Offered as needed. Prerequisite: Consent of the instructor*

35.304 Special Topics in Music Performance (3) — Provides a unique experience in performance or the study of performance practice. Instructor develops a one-time-only study. Information is available by contacting the Department of Music. Offered as needed.

35.305 Special Topics in Music Appreciation (3) — Provides a study of music beyond currently available course topics. Instructor develops a one-time-only study. Information is available by contacting the Department of Music. Offered as needed.

35.320 Music in the Elementary School (3) — Provides students with practical skills, theoretical background, and musical knowledge that

will enable them to teach general music effectively in the elementary classroom. Course designed primarily for elementary education majors. Limited seating.

35.321 Music History to 1750 (Fall) (3) — Emphasizes understanding and appreciation of music from medieval times to 1750 through listening and development of a technical vocabulary.

35.322 Music History—1750 to Present (Spring) (3) — Provides an overview of music history from the Classical era to the present time. Includes discussion of composers and significant persons, works, and development of forms and genres during this time frame.

35.323 Choral Conducting and Methods (Spring/even-numbered years) (3) — Examines the development of techniques and abilities for participating in and supervising choral ensembles. Stresses tone production, proper breathing, choral conducting, and reading of appropriate literature. *Prerequisite: 35.211*

35.324 American Music (Fall/even-numbered years) (3) — Studies works of selected American composers with reference to characteristics indigenous to American music. *Prerequisite: 35.101*

35.325 Opera and Music Theater (Spring/odd-numbered years) (3) — Studies major works of the lyric stage. Emphasizes listening to and reading works of opera, operetta, and the popular theater. *Prerequisite: 35.101*

35.327 Survey of Popular Music (Fall/odd-numbered years) (3) — Analyzes factors and elements of American popular music with emphasis on developments in the 20th century. Includes a chronological study of jazz, balladry, spiritual, country-western, theater, film, and rock in comparative listening situations. *Prerequisite: 35.101*

35.329 Instrumental Conducting (2) — Develops skills in baton technique and score reading with emphasis on practical application in instrumental organizations. Laboratory course with three 50-minute sessions per week. Offered as needed. *Prerequisites: music major and 35.211*

35.350 Seminar in Music Theater (3) — Studies the Broadway musical with special emphasis on works currently in production. Offered in conjunction with music theater productions during spring and summer semesters. *Prerequisite: 35.101*

35.410 Music Theory V, Counterpoint (Fall/even-numbered years) (2) — Continuation of

music theory. Studies melodic writing in two and three voices using 18th century style. Requires 2 hours per week. *Prerequisite: 35.211*

35.411 Music Theory VI, Orchestration (*Spring/odd-numbered years*) (2) — Continuation of music theory. Examines instrumental transposition, idioms, score writing, and analysis. Requires 3 hours per week. *Prerequisite: 35.211*

35.430 Seminar in Music History I (2) — Emphasizes development of skill in independent research in areas of music history for majors in music electing the music history specialization. Offered as needed. *Prerequisite: 35.321, 35.322*

35.431 Seminar in Music History II (1) — Con-

tinuation of 35.430 with emphasis on academic research and musicology for majors in music electing the music history specialization. Offered as needed. *Prerequisite: 35.430*

35.497 Internships in Music (3-15) — Provides for extended off-campus field experience to be arranged by the major in music, a faculty adviser, and an off-campus agency. *Requires consent of music department during pre-scheduling. Offered as needed.*

35.498 Independent Study in Music (1-3) — Provides for a student project of a creative nature in music history, education or performance. Requires consent of music department during prescheduling.

Department of Nursing

Faculty

- M. Christine Alichnie, R.N., Chairperson, Professor — B.S., University of Pittsburgh; M.S., Wilkes College; M.S., Ph.D., University of Pennsylvania
- Patricia B. Torsella, R.N., Assistant Chairperson, Associate Professor — R.N., Hahnemann Hospital School of Nursing; B.S.N., M.S.N., University of Pennsylvania; D.N.Sc., Widener University
- Jean E. Berry, R.N., Associate Professor — B.S.N., Georgetown University; M.S.N., University of Pennsylvania
- Julia A. Bucher, R.N., Associate Professor — B.S.N.; University of Delaware; M.S.N., University of Washington; M.P.M., Seattle University; Ph.D., The Pennsylvania State University
- Robert L. Campbell, R.N., Associate Professor — R.N., Robert Packer Hospital School of Nursing; B.S.N., University of Pittsburgh; M.N., University of Washington
- Mary Ann Cegielsky, R.N., Assistant Professor — R.N., Ashland State Hospital School of Nursing; B.S.N., The Pennsylvania State University; M.S.N., Villanova University
- Carolyn M. Dalton, R.N., Assistant Professor — B.S., M.S., The University of Connecticut
- Margie Eckroth-Bucher, R.N., Instructor — B.S.N., Wilkes University; M.S.N., University of Pennsylvania
- Mary A. Gavaghan, R.N., Associate Professor — B.S.N., M.S.N., University of Pennsylvania; Ed.D., Temple University
- Annette Gunderman, R.N., Associate Professor — B.S.N., Bloomsburg University; M.S.N., A.B.D., The Pennsylvania State University
- Sharon Haymaker, R.N., Instructor — B.S.N., University of Maryland; M.S.N., Case Western Reserve University; Ph.D., The Johns Hopkins University
- Sharon S. Kribbs, R.N., Assistant Professor — diploma, Harrisburg Hospital School of Nursing; B.S.Ed., Bloomsburg State College; M.N., The Pennsylvania State University
- Mary Alexandrakos-Koko, R.N., Instructor — diploma, St. Luke's Hospital School of Nurs-

ing; B.S.N., Thomas Jefferson University; M.S.N., University of Pennsylvania

Cathy E. Livengood, R.N., Assistant Professor — B.S., Alderson-Broaddus College; M.S.N., West Virginia University

Bernadine T. Markey, R.N., Assistant Professor — diploma, Hospital University of Pennsylvania; B.S., Bloomsburg University; M.S., Ph.D., The Pennsylvania State University

Fredda A. Massari-Novak, R.N., Instructor — diploma, Reading Hospital School of Nursing; B.S.N., Catholic University of America; M.S.N., Allentown College of St. Francis de Sales

Carol M. Moore, R.N., Instructor — B.S.N., Bloomsburg University; M.S.N., University of Pennsylvania

Nancy A. Onuschak, R.N., Professor — diploma, Wyoming Valley Hospital School of Nursing; B.S., M.S.Ed., Wilkes College; M.N., The Pennsylvania State University; D.E.D., Temple University

Sue Ross, R.N., Instructor, A.B., Wilson College, B.S., Columbia University; M.S., University of Utah

Gloria J. Schechterly, R.N., Instructor — Diploma, Geisinger Medical Center School of Nursing; B.S.N., Wilkes College; M.S., A.B.D., The Pennsylvania State University

Joan B. Stone, R.N., Assistant Professor — R.N., Harrisburg Hospital School of Nursing; B.S.N., University of Pennsylvania; M.S.N., D.Ed., The Pennsylvania State University

Dorette E. Welk, R.N., Professor — B.S.N., D'Youville College; M.S.N., University of Pennsylvania; Ph.D., The Pennsylvania State University

Degree Program

Bachelor of Science in Nursing

A total of 57 semester hours is required for a major in nursing.

Goals and Objectives

The nursing program prepares students for the basic goal of nursing which is to promote, restore, and maintain health and to facilitate the realization of the client's optimal potential for wellness throughout the lifespan. Nurses accomplish this goal through the applica-

tion of knowledge, critical thinking, and effective communication in the use of the nursing process, therapeutic skills, and technology as they administer nursing services to clients in diverse cultures in a variety of settings.

The Bachelor of Science in Nursing (BSN) is awarded to those students who successfully complete the requirements for the degree. Degree recipients (non-RN) are then eligible to take the NCLEX licensure examination administered by the Board of Nursing in the state of their choice.

Students must assume responsibility for their own travel to both inpatient and outpatient/community clinical agencies. Travel may vary from one mile to approximately 40 miles, depending on the nature of clinical experiences.

For information on the policies related to admission, promotion, retention, transfer, advanced placement, and dismissal, see the section on the College of Professional Studies.

Generic Students

Generic is a term used by the National League for Nursing and the Pennsylvania State Board of Nursing to designate students who are not registered nurses. Four types of candidates fall into the generic category: freshman candidates, external transfer candidates, internal transfer candidates, and second degree candidates.

General Education Courses

A number of the prescribed courses in the physical sciences and social sciences, required as prerequisites for the nursing curriculum, may also apply toward General Education Requirements in Groups B and C.

Required Courses

Prerequisite Courses: Psychology 48.101, 48.210; Sociology or Anthropology 45.211 or 45.213 or 46.200; Biological and Allied Health Sciences 50.173, 50.174, 50.240; Chemistry 52.101, 52.108

Professional Courses: Nursing 82.210, 82.211, 82.212, 82.213, 82.214, 82.306 (an introductory course in statistics is prerequisite—either Psychology 48.160 or Mathematics 53.141), 82.311, 82.312, 82.410, 82.411, 82.412, 82.413

Elective Courses

Additional courses must be taken as necessary to complete the minimum graduation re-

quirement of 128 semester hours.

Registered Nurses

Required Courses

Prerequisite courses to the major are: Psychology 48.101, 48.210; Sociology or Anthropology 45.211 or 45.213 or 46.200; Biological and Allied Health Sciences 50.173, 50.174, 50.240; Chemistry 52.101, 52.103, and 52.108.

Professional Courses

The following courses are required for RN students: Nursing 82.305, 82.306 (a statistics course, either Psychology 48.160 or Mathematics 53.141, is prerequisite); 82.410 and 82.413.

Elective Courses

Additional courses must be taken as necessary to complete the minimum graduation requirement of 128 semester hours.

General Education Courses

A number of the prescribed courses in physical sciences and social sciences, required as prerequisites for the nursing curriculum, may also apply toward meeting General Education Requirements in Groups B and C.

Advanced Placement

RNs may earn credits through examinations if they meet the required prerequisites and provisions to the course(s) being challenged. The mechanisms for advanced placement are as follows:

- a. Credit by Examination (faculty prepared examinations) procedure as explained earlier in this catalog. In the Department of Nursing, the RN may petition for credit by examination in courses 82.211, 82.212, 82.214 and 82.410. Nursing study guides are available to facilitate review for these examinations. Petitioning for credit by examination can only occur following admission to the university. Other departments can be contacted to petition for credit by examination based upon university policy. The student must go directly to the chairperson of the individual department (i.e. Department of Biological and Allied Health Sciences, Department of Chemistry).
- b. College Level Equivalency Examination Program (CLEP), procedure as explained elsewhere in this catalog.
- c. NLN Mobility Profile II: 36 semester hours

of advanced placement may be earned through the successful completion of four NLN Mobility Profile II tests. A failure on the examination will require enrollment in the recommended Bloomsburg University course. Information about the NLN Mobility Profile II tests may be obtained from the Department of Nursing.

The following is a suggested four-year sequence for the BSN curriculum, including the code number, title, and semester hours for each course.

Freshman Year

Fall Semester

50.173	Anatomy/Physiology I	4
52.101	Introductory Chemistry	3
48.101	General Psychology	3
20.101 or 20.104	Composition I Honors Composition	3
05.000	Survival Elective	1 2

Spring Semester

50.174	Anatomy/Physiology II	4
52.108	Physiological Chemistry	4
45.211 or 45.213	Principles of Sociology Contemporary Social Problems	3 3
or 46.200	Principles of Cultural Anthropology	3
48.210	Life-Span Psychology	3
20.201 or 20.200	Composition II Writing Proficiency Examination	3 1
05.000	Survival	1

Sophomore Year

Fall Semester

50.240	Introductory Microbiology	3
82.210	Nursing I (non-RNs)	3
82.211	Nutrition	3
82.212	Pharmacology	3
	Communication elective	3
05.000	Survival	1

Spring Semester

82.213	Nursing II	6
82.214	Health Assessment	3
	Statistics	3
	Quantitative-Analytical Electives or General Education Requirements	6

In the junior and senior years, the class is divided in half so that half the students take the level classes in a different sequence.

Junior Year

Fall or Spring Semester

82.305	Role Development for Nurse Generalist (RNs only)	3
82.311	Nursing III	8
	Values electives	3
82.306	Methods of Inquiry	3
	<i>Fall or Spring Semester</i>	
82.312	Nursing IV	8
	General Education Requirement9	

Senior Year

Fall or Spring Semester

82.410	Nursing V	6
82.411	Nursing VI	6
	Free elective	3
	<i>Fall or Spring Semester</i>	
82.412	Nursing VII	8
82.413	Nursing Trends and Issues	3
	Free elective	3

Nursing (Code 82)

Courses within the nursing curriculum are restricted to students in the B.S.N. program, except for 82.217 Alcohol: Use and Abuse which is a values or free elective open to all students.

82.200 Nursing Placement (Variable) — A number used to transfer in advanced placement credits resulting from NLN Mobility II Profile tests or ANA certification examinations which may be taken by registered nurses.

82.210 Nursing I (3) — Focuses on the development of a foundation for the professional practice of nursing within the health care delivery system. Students develop understanding and beginning level competence in professional behaviors critical to the enactment of the nursing roles of practitioner, teacher, consumer of research and leader/manager. Students use a holistic, humanistic approach as they learn to view clients from a systems perspective. Students begin to relate historical, legal, ethical, cultural and spiritual principles to nursing practice as they use the nursing process with clients in simulated and community settings. *Prerequisites: Sociology 45.211 or 45.213 or Anthropology 46.200; Psychology 48.101, 48.210; Biological and Allied Health Sciences 50.173, 50.174, Chemistry 52.101, 52.103; concurrent 50.240; sophomore nursing student status*

82.211 Nutrition (3) — Introduces the principles of nutrition and ways in which these principles are applied to promote an optimal level

of wellness for all individuals. Topics include nutritional requirements for maintaining health and development throughout the lifespan as well as factors affecting food choices of individuals and society. *Prerequisites: Biological and Allied Health Sciences 50.173, 50.174; Chemistry 52.101, 52.103; Sociology 45.211 or 45.213 or Anthropology 46.200; Psychology 48.101, 48.210; concurrent 50.240; sophomore nursing student status*

82.212 Pharmacology (3) — Provides a foundation in pharmacology for pharmacologic content integration throughout the curriculum. Explores the legal, social, ethical, historical, and political dimensions of pharmacotherapeutics. *Prerequisites: Biological and Allied Health Sciences 50.173, 50.174; Chemistry 52.101, 52.103; Sociology 45.211 or 45.213 or Anthropology 46.200; concurrent 50.240; sophomore nursing student status*

82.213 Nursing II (6) — Focuses on the use of the nursing process to facilitate an optimal level of wellness of adult individuals in a diverse and multicultural society in nonlife-threatening, adaptive situations in community hospitals. Content is organized within the framework of the basic human needs of self-concept, security, mobility, nutrition/elimination, and oxygen-ation and developed through application of the nursing process. Beginning role behaviors are applied in the clinical setting. *Prerequisites: 82.210, 82.211, 82.212; Biological and Allied Health Sciences 50.240*

82.214 Health Assessment (3) — Introduces techniques and principles of health assessment for adult clients. Communication and interviewing skills are reinforced throughout the course. Health patterns of adults are assessed. Validation of health histories and practice of review of systems and basic assessment skills will occur in the simulated learning laboratory.

82.217 Alcohol: Use and Abuse (3) — Provides comprehensive overview of alcohol use and misuse in the American population. Because alcohol is a leading public health problem in the U.S., this course is intended for students in all disciplines. Examines the nature of alcohol problems as well as socio-cultural attitudes towards drinking. Explores alcohol's effects on the body. Discusses the impact of alcoholism on adolescents, professional workers, women, the elderly, and the family. Examines prevention, intervention, and referrals. An overview of treatment and rehabilitation that includes spiritual, moral, and legal aspects.

82.305 Role Development for the Nurse Generalist (RN) (3) — Resocializes the registered nurse for professional practice. Introduces the purpose, objectives, and conceptual framework of the Department of Nursing's program. Through increased knowledge and integration of varied professional nursing concepts, the student develops the roles of practitioner, teacher, leader/manager, and consumer of research. *Prerequisites: Current state RN's license; Biological and Allied Health Sciences 50.173, 50.174, 50.240; Sociology 45.211 or 45.213 or Anthropology 46.200; Psychology 48.101, 48.210; 48.160 or Mathematics 53.141; Chemistry 52.101, 52.103, 52.108; Nursing 82.211, 82.212, 82.213; NLN Mobility Profile II examinations*

82.306 Methods of Inquiry (3) — Introduces research methods and techniques to assist students in becoming consumers of research. Emphasizes the contribution of research to the discipline and the consumer's role in critically evaluating, applying, and disseminating research findings. Requires students to demonstrate use of research principles and skills in scholarly written and oral communications. *Prerequisite: Psychology 48.160 or Mathematics 53.141; Junior standing; 82.305 (if RN) or consent of instructor*

82.307 Geriatric Nursing (3) — Focuses on the physiological, psychological, and social aspects of aging with emphasis on the assessment of problems and appropriate nursing intervention. *Prerequisite: Junior or Senior standing or RN*

82.311 Nursing III (8) — Focuses on the use of the nursing process in helping adult individuals and families reach their optimal level of wellness as they adapt to chronic and potentially life-threatening situations. Content is organized within the framework of five basic human needs. Professional role behaviors continue to develop in clinical settings in medical centers/hospitals as the student achieves a broader perspective of the client as an individual and a family. *Prerequisite: 82.213*

82.312 Nursing IV (8) — Focuses on the use of the nursing process, in accord with ANA standards, to facilitate optimal level of wellness of beginning and developing families. Theories of growth and development and family developmental tasks provide the framework for planning and implementing nursing care with clients of diverse cultures. Students develop in their role performance as they interact with clients and a variety of providers to assist families to attain an optimal level of wellness. *Pre-*

requisite: 82.213

82.313 Special Topics (1-6) — Presents a diversity of topics focusing on contemporary trends, issues, and problems relevant to the principles and practice of professional nursing in the health care system. *Prerequisite: Junior standing*

82.405 Independent Study (1-6) — Requires investigation of an area of special interest and value to the student under the direction of a faculty member following a plan approved by the department chairperson. Course may be interdisciplinary. *Prerequisite: Senior standing or consent by department*

82.410 Nursing V (6) — Focuses on the use of the nursing process in assisting the community with its adaptive responses to facilitate an optimum level of wellness of holistic humankind. Process of role development is fostered through independent and interdependent activities with a variety of culturally diverse population aggregates in community settings. *Prerequisites: 82.305 (if RN), 82.306, 82.311, 82.312*

82.411 Nursing VI (6) — Provides a holistic focus on a diverse, multicultural client population at various points on the mental health/mental illness continuum. Relevant principles and theories of human behavior, adaptation, and therapeutic intervention provide a framework for the planning and implementation of nursing care. Students employ a "therapeutic use of self" as they implement the nursing process to assist individuals, families, and communities in attaining and maintaining an optimal level of mental wellness. Enhances the student's professional role development through a variety of independent and interdependent activities with clients and the interdisciplinary team which are designed to improve the quality of mental health care. *Prerequisites: 82.305 (if RN), 82.306, 82.311, 82.312*

82.412 Nursing VII (8) — Focuses on meeting the health care needs of a diversity of adult clients in complex and life-threatening situations. Students use critical thinking skills in assisting clients to attain and maintain an optimal level of wellness. They collaborate with clients and the interdisciplinary team in acute care and community settings in the implementation of preventive, restorative, and rehabilitative activities designed to maintain optimal health of holistic man. Learning experiences are provided in medical centers/hospitals so that the student can continue to develop pro-

ficiency as a practitioner, teacher, and consumer of research. Emphasis directed toward learning activities which allow student to function as a leader/manager to improve the quality of health care. *Prerequisites: 82.305 (if RN), 82.306, 82.311, 82.312*

82.413 Nursing Trends and Issues (3) — Explores the nature of professional nursing as it occurs in our society with particular reference to the health care system and the future. Uses seminar format to explore and analyze current issues and trends in professional nursing. *Prerequisites: 82.305 (if RN), 82.306, 82.311, 82.312*

Courses for Non-Matriculating RNs

The following courses are offered through the School of Extended Programs on a demand basis for RNs not matriculated with the BSN program. The courses are designed to expand their knowledge and skills bases in the research process in nursing.

82.204 Critical Evaluation of Research in Nursing (1) — Introduces research methods and techniques. Focuses on the student as a consumer of research with emphasis critiquing research studies for application and the ethics of research with human subjects.

82.205 Research Application in Nursing (1) — Focuses on the contribution of research to the discipline and the consumer's role in applying research findings. Emphasizes identifying researchable problems and improving practice through application of research findings. *Prerequisites: 82.204, statistics course*

82.206 Proposal Writing in Nursing (1) — Focuses on the research process in identifying a researchable problem and formulating a beginning level research prospectus. Emphasizes conceptualization of a design to study a research problem. *Prerequisite: 82.204, 82.205, statistics course, or consent of instructor*

Health Sciences (Code 80)

80.400 Health Sciences Internship (3-6) — Provides the opportunity to apply acquired knowledge in an on-site practicum experience under the supervision of an appropriately credentialed preceptor. Open to students in the health sciences. *Prerequisite: Senior standing*

Department of Business Education and Office Administration

Faculty

Roger W. Ellis, Chairperson, Associate Professor — B.S., M.Ed., Bloomsburg State College; Ed.D., Arizona State University

Ellen M. Clemens, Associate Professor — B.S., M.Ed., Bloomsburg State College; D.Ed., The Pennsylvania State University

Donna J. Cochrane, Professor — A.A.S., Dutchess Community College; B.S., M.S., State University of New York at Albany; Ed.D., Temple University

Nancy A. Dittman, Associate Professor — B.S., Florida State University; M.Ed., University of Florida; Ed.D., University of Colorado

Dennis O. Gehris, Associate Professor — B.S., M.A., Rider College; Ed.D., Temple University

Janice C. Keil, Assistant Professor — B.S., M.Ed., Bloomsburg State College; Ed.D., Temple University

John J. Olivo Jr., Professor — B.S., Davis and Elkins College; M.Ed., Trenton State University; Ph.D., Michigan State University

Degree Program

Bachelor of Science in Office Administration

A total of 81 to 84 semester hours is required for a major in office systems. This total reflects program requirements and General Education courses.

Goals and Objectives

Office systems is a relatively new field of study that focuses on the impact of technology on the end-user. Office systems is one component of business information systems. The program in office systems at Bloomsburg is modeled after the Office Systems Research Association Curriculum, which has been endorsed by business, industry, and educational institutions of higher learning. This program provides the student with the skills and knowledge to manage human resources, technology, and the environment and to update procedures in today's highly competitive business world. Currently, only 68 universities in the nation offer a degree in office systems, and the program at Bloomsburg University is consid-

ered a national model.

Required Courses

Required courses include: General Business 90.101 and 90.333; Financial Accounting 91.220 and 91.223; Computer and Information Systems 92.150; Management 93.344, 93.446, and 93.449; Office Systems 94.221, 94.302, 94.330, 94.401, 94.403, and 94.405. Finance 96.313; Marketing 97.310; and Business Law 98.331.

Electives and Free Electives

Students must choose 15 semester hours in elective courses from General Business, Accounting, Computer and Information Systems, Management, Office Systems, Finance, Marketing, and Business Law. Students must choose 8 semester hours in free elective courses.

General Education Courses

The following general education courses are required: English 20.101 and 20.201; Speech Communication 25.103; Economics 40.211, 40.212, and 40.246 or Mathematics 53.123 and 53.141.

Office Systems (Code 94)

94.221 Office Systems Concepts (3) — An overview of office systems—technology, people, and procedures within organizational and environmental contexts. Major technologies, both hardware and software, that support information creation, storage, retrieval, manipulation, and distribution are covered. Introduces applications and systems software using computer laboratory projects.

94.302 Business Document Generation (3) — Provides the student with the opportunity to use computer and business applications software to produce business documents.

94.330 Telecommunications (Spring only) (3) — An introduction to telecommunications in the business environment. Topics include telephone, data codes, protocols, network architectures, local area networks, communications media, hardware, and software. Management issues and practical applications are integral

to course. Emphasis on application of telecommunications to facilitate information interchange in whatever form the information takes: data, voice, text, and image. *Prerequisite: Junior standing*

94.401 Information Resource Management (3)

— Provides a study of records creation, inventory and analysis, active and inactive records maintenance, storage and retrieval, micrographics, and computer information management systems. *Prerequisite: Senior standing*

94.403 Office Systems Management (3) — A study of the most acceptable methods and practices of office systems. Topics include organi-

zation and planning of office systems, human relations, controlling operations, and processing information. Emphasis on competencies needed for organizing and administering automated office systems. *Prerequisite: Senior standing*

94.405 Training and Development in Office Systems (Fall only) (3) — Application of theories of learning and instructional development to the education and training of employees in office systems. Topics include instructional design, technology, and the implementation, evaluation, and management of training in an organizational environment. *Prerequisite: Senior standing*

Department of Philosophy

Faculty

Richard J. Brook, Chairperson, Professor — B.A., Antioch College; M.A., Columbia University; Ph.D., New School, N.Y.C.

Steven D. Hales, Assistant Professor — B.A., Southwestern University; Ph.D., Brown University

Oliver J. Larmi, Professor — A.B., Dartmouth College; Ph.D., University of Pennsylvania

Wendy Lee-Lampshire, Assistant Professor — B.A., University of Colorado; Ph.D., Marquette University

Scott C. Lowe, Associate Professor — B.A., College of William and Mary; M.A., Ph.D., University of Virginia

Degree Program

Bachelor of Arts in Philosophy

A total of 30 semester hours is required for a major in philosophy.

Goals and Objectives

The Department of Philosophy offers a broad range of courses designed to provide both a general acquaintance with the issues and methods of philosophy as well as a solid foundation for advanced work in the discipline. In all of its courses, the department seeks to encourage students to develop their thinking skills, by engaging them with the best minds of the past and present, by challenging them to examine and to criticize the arguments of others, and by leading them to question their own values and commitments. Regardless of topic or level of difficulty, philosophy courses provide a unique opportunity to acquire and to practice a variety of valuable skills, such as the ability to solve problems, to communicate effectively, and to assess the strength and cogency of opposing arguments and proposed plans of action.

The five-member department offers both a major and a minor in philosophy, and also supports the university's liberal arts mission by including courses that satisfy various general education requirements (i.e., in the humanities division and in the area of values, ethics, and responsible decision making). Students who complete a major or a minor in philoso-

phy are well prepared to pursue advanced work in the discipline or to apply their philosophical skills in multiple career settings such as law, medicine, business, or government.

Required Courses

The following courses are required: Philosophy 28.212, 28.221, 28.224, 28.228 or 28.229; 28.213 can be substituted for 28.212.

Elective Courses

Six elective courses must also be selected in addition to the required courses for this degree program. Two courses must be from the 300 or above level sequence: 28.303, 28.305, 28.306, 28.307, 28.308 or 28.351.

Minor in Philosophy

A total of 18 semester hours is required for a minor in philosophy. Required courses are: 28.111, 28.212, and 28.220. Course 28.110 as well as 28.213 can meet the logic requirement for the minor. Three elective courses must be selected. Choose one elective from either the historical sequence, 28.221, 28.224, 28.228 or 28.229, or one systematic course (a 300 level or above course).

Philosophy (Code 28)

28.110 Critical Thinking (3) — Designed for students to learn how to think critically. Emphasis is on the construction and evaluation of arguments. Surveys several forms of argument including inductive, deductive, analogical, and legal reasoning.

28.111 Introduction to Philosophy (3) — Presents reflective inquiry into selected problems of general philosophic interest. Considers the types of knowledge, individual and social values, the nature of reality, and the existence of God.

28.212 Logic (3) — Reviews methods and principles of reasoning with applications to contemporary debates. Examines informal fallacies, the syllogism, predicate calculus, sentential calculus, quantification, and induction.

28.213 Logic and Computing (3) — Introduces fundamental areas where logic and compu-

tation intersect including the propositional calculus and the design of logic circuits; validity and proof; Turing machines and logic programming.

28.220 Ethics (3) — Studies ethical theory focusing on such issues as ethics as a branch of knowledge, egoism vs. altruism, and role of intentions and consequences in moral judgments. Reviews theories such as relativism, utilitarianism, and Kantianism. Investigates concepts of "rights" and "justice."

28.221 Plato and Aristotle (Fall) (3) — Studies the origins of Western philosophy in ancient Greece. Examines Plato's philosophical writings in light of pre-Socratic speculation on one hand and in terms of Aristotle's criticisms and developments on the other.

28.224 Descartes to Kant (Spring) (3) — Examines the writings of the 17th and 18th century philosophers: Descartes, Hobbes, Locke, Berkeley, Hume, Kant, and others. Topics include: the nature of reality, the sources and limits of knowledge, the relation between mind and body, and the possibility of a rational basis for religious belief.

28.228 Existentialism (Spring/even-numbered years) (3) — Studies the writings of philosophers and theologians such as Kierkegaard, Nietzsche, Husserl, Sartre, and Tillich. Major themes include human subjectivity, human freedom, alienation, and meaning.

28.229 Contemporary Philosophy (Fall/odd-numbered years) (3) — Examines 20th century philosophical movements. Emphasizes the relation between language and philosophy, particularly views about truth, free will, the nature of morality and religion, and the nature of mind.

28.290 Medical Ethics (3) — Investigates moral issues that arise in such medical contexts as human experimentation, death and dying, medical care and its distribution, genetic engineering, and the definition of health and illness.

28.292 Contemporary Moral Problems (3) — Investigates some of the major contemporary (and perennial) moral problems: abortion and the rights of the fetus; pornography and its control; crime and its punishment; obedience to laws; discrimination based on race and sex; decision-making procedures; social justice;

drugs, suicide, and euthanasia; freedom and its limits.

28.295 Business Ethics (Spring/even-numbered years) (3) — Review of moral canons in relation to business practice. Moral concepts are applied in analyzing situations. Utilitarianism, Kantianism, and contemporary Egalitarianism are introduced as aids in decision making. General principles and concrete cases considered.

28.303 Philosophy of Science (Fall/even-numbered years) (3) — Analyzes the logic of inquiry in the natural and social sciences; the nature of scientific explanation, problems of causality, measurement, prediction, and verification. Considers case studies, such as evolutionary theory.

28.304 Philosophy of the Social Sciences (Spring/odd-numbered years) (3) — Examines philosophical problems in the social sciences including objectivity, classification, explanation, the nature of laws, and the nature of social facts.

28.305 Philosophy of Law (Fall/even-numbered years) (3) — Examines the theoretical background of the law and legal systems. Encourages students to develop their own views about the proper use of the law. Topics include the concepts of "law" and "legal system," limits of the law, and justification of punishment.

28.306 Philosophy of Religion (3) — Presents a critical analysis of the origins and nature of faith. Emphasizes types of religion, evidence supporting religious belief, and problems in and challenges to religion.

28.307 Contemporary Political Philosophy (Fall/odd-numbered years) (3) — Studies the nature of the good and just state, the limits and powers of the state. Investigates competing theories of neo-Aristotelianism, utilitarianism, contractarianism, libertarianism, Marxism, and anarchism. Addresses questions concerning the obligations of an individual citizen to the state.

28.308 Feminist Philosophy (3) — Explores the major trends in feminist philosophy including liberal, Marxist, socialist, radical, and psychoanalytic approaches. Explores such questions as whether women's experience differs from men's, and the extent to which male domination informs woman's experience. Considers

recent feminist attempts to articulate an emancipating standpoint.

28.351 Theory of Knowledge (*Spring/odd-numbered years*) (3) — Inquires into the problem of knowledge, certainty, and skepticism. Reviews theory of perception; discusses concepts of meaning and truth.

28.352 Minds, Brains and Computers (*Fall/even-numbered years*) (3) — Explores the philosophical foundations of the interdisciplinary field of cognitive science. Topics discussed include contemporary scientific solutions to the mind-body problem, the possibility of artificial

intelligence, and the nature and success of cognitive explanations in psychology.

28.470 Independent Study in Philosophy (3-6) — Provides for individual study of a particular philosophical problem under the guidance of the staff. Emphasizes independent research on topics selected by the student and the faculty member. *Course may be taken twice.* Prerequisite: 6 semester hours of philosophy. See section on *Independent Study* on page 10.

28.471 Seminar (3) — Studies selected problems in philosophy.

Department of Physics

Faculty

- P. James Moser, Chairperson, Professor — B.S., M.S., Ph.D., The Pennsylvania State University
- Christopher Bracikowski, Assistant Professor — B.S., University of Rochester; Ph.D., Georgia Institute of Technology
- Jack G. Couch, Professor — B.A., Utah State University; M.A., Vanderbilt University; Ph.D., Texas A & M University
- P. Joseph Garcia, Associate Professor — B.S., Kent State University; M.S., New Mexico Highlands University; D.Ed., The Pennsylvania State University
- David J. Harper, Professor — B.Sc., Ph.D., University of Nottingham, England
- Gunther L. Lange, Assistant Professor — B.S., Ph.D., The Ohio State University
- Peter C. Stine, Associate Professor — B.A., Wesleyan University; Ph.D., The Pennsylvania State University
- M. Gene Taylor, Professor — B.S., Muskingum College; M.S., Ph.D., Brown University
- Stephen G. Wukovitz, Associate Professor — B.A., M.A., Montclair State College

Degree Programs

Bachelor of Arts in Physics, Bachelor of Science in Physics, Bachelor of Science in Health Physics

The bachelor of arts program requires 54 semester hours for a major in physics.

The bachelor of science program requires 71 semester hours for a major in physics.

The bachelor of science program requires 68 semester hours for a major in health physics.

Goals and Objectives

The Bachelor of Arts in Physics provides a background suitable for direct entry into employment by industry or government. It meets the specifications for qualification as a physicist of the Civil Service Commission. This degree also provides the qualifications necessary for admission to graduate study in most colleges and universities offering master of science and doctor of philosophy degrees in physics and in other specialized interdisciplinary

fields. Students may combine the physics degree with an engineering degree through the engineering/liberal arts program offered by Bloomsburg University in cooperation with The Pennsylvania State University or Wilkes University (See section on Engineering and Liberal Arts.)

The Bachelor of Science in Physics provides the opportunities and qualifications of the Bachelor of Arts degree, with greater emphasis on the area of specialization.

The profession of health physics is devoted to the protection of people and their environment from potential radiation hazards, while at the same time making it possible for our advancing civilization to enjoy all the benefits resulting from the controlled use of radiation. Health physicists are employed in industrial laboratories, medical centers, and government agencies.

The Bachelor of Science in Health Physics provides a sound background of courses in physics, mathematics, chemistry and biology, as well as specialized courses in health physics. Modern laboratories introduce students to state-of-the-art instrumentation and advanced techniques of measurement. An internship course provides experience of the application of health physics in industrial, medical, or government environments. The program provides the qualifications needed for direct entry into the practicing profession or into graduate school for greater specialization in health physics.

Bachelor of Arts in Physics

Required courses: Physics 54.211, 54.212, 54.302, 54.310, 54.314, 54.400; 12 semester hours chosen from other physics courses numbered above 300; Mathematics 53.125, 53.126, 53.225, 53.322; Computer Science 56.210; Chemistry 52.115, 52.216.

Bachelor of Science in Physics

Required courses: Physics 54.211, 54.212, 54.302, 54.310, 54.312, 54.314, 54.318, 54.400, 54.422, 54.450; 12 semester hours chosen from other physics courses numbered above 300; Mathematics 53.125, 53.126, 53.225, 53.322;

Computer Science 56.210; 3 semester hours chosen from Mathematics 53.226, 53.314, or Computer Science 56.373; Chemistry 52.115, 52.216.

Bachelor of Science in Health Physics

Required courses: Physics 54.211, 54.212, 54.310, 54.315, 54.320, 54.330, 54.360, 54.420, 54.460, 54.470; Mathematics 53.125, 53.126, 53.225, 53.241, 53.322; Computer Science 56.210; Chemistry 52.115, 52.216; Biological and Allied Health Sciences 50.110, 50.120, 50.411.

Minor in Physics

Required courses: Physics 54.211, 54.212, 54.315, 54.316, 54.317. These courses must be taken in sequence.

Requirements for the Bachelor of Science in Education with a concentration in physics are found in the section on Secondary Education.

For more information on the associated engineering program, see the section on Engineering and Liberal Arts.

Physics (Code 54)

54.101 Basic Physical Science (3) — An introductory integration of concepts and principles from chemistry, physics, and astronomy, with consideration for the nature of scientific thought and the interaction of science with human and community concerns. *For nonscientists.*

54.103 Principles of Physical Science (3) — An integrated physical science course emphasizing laboratory experience. Provides an introduction to the basic concepts of physical science by studying such topics as the structure and properties of matter, motion and forces, energy, light and sound, electricity and magnetism, and astronomy. *For elementary education majors. Four hours class/laboratory per week.*

54.104 Elementary Electronics (3) — An introduction to basic electronics that gives students in nonphysical science areas some theoretical and practical knowledge of electronic circuits, instruments, and devices. *No experience of physics or electronics required.*

54.105 Energy: Sources and Environmental Effects (3) — Explains energy in elementary scientific terms and examines present national and international energy situations in regard to sources, utilization, and environmental ef-

fects. Surveys fossil fuels and nuclear, solar, geothermal, and other energies with respect to availability and promise for the future.

54.106 The Science of Sound (3) — Provides an introduction to the principles of sound and its reproduction for students in nonphysical science disciplines. Knowledge of basic algebra required, but no experience in physics or electronics necessary.

54.107 Applied Physics for Health Sciences (Spring) (4) — Studies selected principles of physics with applications to the processes and instrumentation of medical technology. Examines mechanics, fluids, kinetic energy and heat, optics, electricity and magnetism, electronics, atomic structure, radiation, and data acquisition and readout. *Six hours per week: 3 classes, 3 laboratories.*

54.110 Introduction to Astronomy (3) — Surveys the physical state of the universe and the variety of objects it comprises: solar system, stars, galaxies. Provides a descriptive account of the present state of our knowledge of the cosmos and an understanding of how such knowledge is obtained. *Intended for nonscience majors.*

54.111 Introductory Physics I (Fall) (4) — Presents an approach to selected topics such as mechanics, heat, kinetic theory, molecular theory of gases, wave motion, and sound. *Not intended for students specializing in physics or chemistry. Six hours per week: 3 classes, 3 laboratories.*

54.112 Introductory Physics II (Spring) (4) — Studies electricity, magnetism, light, relativity, quantum and atomic theory, structure of matter, nuclear physics and particle physics. *Continuation of 54.111. Six hours per week: 3 classes, 3 laboratories. Prerequisite: 54.111 or consent of instructor*

54.210 Observational Astronomy (Spring) (3) — Provides hands-on experience in observations of the night sky. Focuses on the interpretation of astronomical measurements, including the students' own telescopic observations of stars, planets, nebulae, and other objects. *Open to non-science majors. Prerequisite: 54.110 or consent of instructor*

54.211 General Physics I (4) — An introduction to physics using calculus. Studies mechanics, the physics of fluids, kinetic theory, heat, and thermodynamics. Appropriate for physical science or mathematics majors. *Six hours per week: 3 classes, 3 laboratories. Prerequisite:*

Mathematics 53.125 or concurrent registration

54.212 General Physics II (4) — Studies wave motion, sound, geometrical and physical optics, electricity, and magnetism. *Continuation of 54.211. Six hours per week: 3 classes, 3 laboratories. Prerequisites: Mathematics 53.126 or concurrent registration; 54.211, or 54.111 with consent of instructor*

54.301 Mechanics: Statics (*Fall/alternate years*) (3) — Introduces the fundamentals of statics, with an emphasis on vector methods, at a level appropriate for physical science majors and for students considering a career in the engineering field. *Prerequisites: Mathematics 53.126 or concurrent registration; 54.211, or 54.111 with consent of instructor*

54.302 Mechanics: Dynamics (*Spring/alternate years*) (3) — Introduces the fundamentals of dynamics, with an emphasis on vector methods, at a level appropriate for physical science majors and for students considering a career in an engineering field. *Prerequisites: Mathematics 53.225 or concurrent registration; 54.212, or 54.112 with consent of the instructor*

54.310 Modern Atomic Physics (*Fall*) (3) — Presents some of the basic concepts and phenomena that constitute modern physics, including studies of the quantum nature of radiation, atomic structure and spectra, X-rays, relativity, wave-particle duality, the uncertainty principle, and a brief introduction to nuclear physics and radioactivity. *Prerequisite: 54.212 or 54.112 with consent of instructor; Mathematics 53.126*

54.314 Electricity and Magnetism (*Alternate years*) (3) — Studies electric and magnetic fields and potentials, electric and magnetic properties of matter, electrodynamics, and electromagnetic waves. *Prerequisites: 54.212, or 54.112 with consent of instructor; Mathematics 53.225*

54.315 Electronics (*Alternate years*) (4) — Presents the theory and application of semiconductors with special emphasis on circuitry. Studies basic electronic instrumentation as related to the gathering, processing, and display of scientific data in any discipline. *Six hours per week: 3 classes, 3 laboratories. Prerequisite: 54.112, or 54.212*

54.316 Digital Electronics (*Alternate years*) (3) — An introduction to the techniques and devices of digital electronics. Includes practical

experience of the building and testing of digital circuits. Supplies the background necessary for the understanding of microprocessors and computer circuits. *Prerequisite: Junior standing or consent of instructor*

54.317 Computer Electronics (*Alternate years*) (3) — An introduction to the electronics and operation of digital computers. Intended for students with a background in digital circuitry. Includes practical experience of the operation and interfacing of microprocessors and other devices. *Prerequisite: 54.316 or consent of instructor*

54.318 Optics (*Alternate years*) (3) — Presents a combination of geometrical optics including lens theory with physical (wave) optics including diffraction, interference, polarization, lasers, and coherent light. *Prerequisite: 54.212, or 54.112 with consent of the instructor*

54.320 Nuclear Radiations I (*Alternate years*) (2) — Presents a laboratory-oriented course using modern nuclear electronics and detectors for measuring and analyzing nuclear radiations. *Four hours per week: one class, 3 laboratories. Prerequisite: 54.310 or concurrent registration*

54.330 Radiation Physics (*Alternate years*) (3) — Presents properties and models of nuclei, radioactive decay, radiation and its interaction with matter, and nuclear applications. *Prerequisite: 54.310 or concurrent registration*

54.360 Health Physics (*Alternate years*) (3) — Presents a study of the principles of health physics, including biological effects of radiation, dosimetry, radiation measurement and radiation protection. *Prerequisite: 54.310 or concurrent registration*

54.400 Advanced Physics Laboratory (*Alternate years*) (2) — Presents the basic tenets of lab work in physics, involving considerations of experimental error, proper research and preparation of an experiment. Includes experiments primarily from the areas of atomic physics, electricity, magnetism, and optics. *Four hours per week: one class, 3 laboratories. Prerequisites: 54.310, 54.314*

54.420 Nuclear Radiations II (*Alternate years*) (2) — A laboratory course which presents advanced techniques of nuclear measurement, and includes applications involving environment monitoring and health physics. *Four hours per week: one class, three laboratories. Prerequisite: 54.320 or consent of instructor*

54.421 Solid State Physics (Alternate years) (3) — Examines physical properties of matter in the solid state. Reviews basic quantum concepts, crystal structure, electrons in metals, electrical conductivity, semiconductors, band theory and the p-n junction. Studies dielectric and magnetic properties of matter. *Prerequisites: 54.310, 54.314; Mathematics 53.225*

54.422 Thermodynamics (Alternate years) (3) — Presents concepts and principles of classical thermodynamics, thermodynamics of simple systems, introduction to kinetic theory, and statistical thermodynamics. *Prerequisites: 54.212 or 54.112 with consent of instructor; Mathematics 53.225*

54.450 Introduction to Quantum Mechanics (Alternate years) (3) — Examines the development and interpretation of Schroedinger's wave mechanics, its mathematical formalism, and the results and predictions of this quantum theory as applied to one-dimensional systems, the hydrogen atom, and multi-electron atoms. *Prerequisites: 54.310; Mathematics 53.225*

54.460 Applied Health Physics (Alternate years) (3) — Presents advanced topics involving health physics principles and radiation protection standards as applied to science, industry, and medicine. *Prerequisite: 54.360 or consent of instructor*

54.490 Seminar in Physics (1) — A selected topic in physics is studied, and prepared in a form suitable for presentation. *Student attends and participates in physics seminars and makes a presentation in the same semester of enrollment in the course*

54.491 Independent Study in Physics (1-3) — Investigates an area of special interest and value to the student, under the direction of a faculty member, following a plan approved in advance by the department chairperson. *May be partly interdisciplinary and may involve limited experimental work*

54.493 Independent Research (1-3) — Provides for an application of theoretical and/or experimental research methods to a special problem. *May be interdisciplinary. Requires the preparation of a report and a plan, approved in advance by the department chairperson, which is acceptable to the student and the supervising faculty member*

54.494 Honors Independent Study in Physics (3) — Provides the qualified student with an opportunity to participate in an advanced experimental or theoretical investigation of a current problem in physics, under the supervision of a physics faculty member having expertise in the student's proposed research area.

Department of Political Science

Faculty

George Agbango, Chairperson, Associate Professor — Specialist Certificate (Geography), University of Cape Coast, Ghana; M.P.A., Atlanta University; Ph.D., Clark Atlanta University

Marla Brettschneider, Assistant Professor — B.A., State University of New York at Binghamton; M.A., Ph.D., New York University

Gloria T. Cohen, Assistant Professor — B.S., M.P.A., Ph.D., Temple University

Richard L. Micheri, Assistant Professor — B.A., Fordham University; M.A., Columbia University

James W. Percy, Associate Professor — A.B., University of Pennsylvania; M.A., Rutgers University

Degree Program

Bachelor of Arts in Political Science

A total of 30 semester hours is required for a major in political science.

Goals and Objectives

The department offers courses in all the major subfields of political science for students who wish to acquire a thorough understanding of the art, science, theories, processes, and structures of governments and politics.

Introductory courses are designed for both majors and non-majors. The importance of government and politics (locally, regionally, nationally, and internationally) clearly points to political science as a critical element in the liberal education of any university student.

Advanced courses are offered for students who need in-depth study and specialized subject matter to serve as a foundation for careers in politics, law, public administration, community service, international relations, criminal justice, communications, or teaching.

All courses attempt to develop the student's ability to read carefully, communicate effectively, think critically, analyze logically, and research thoroughly. A balance is sought between abstract concepts and theories on the one hand and concrete structures, processes, and applications on the other. Field work and internships give students an opportunity to apply

what they have learned in the classroom to the realities of contemporary society.

Required Courses

Required courses total 12 semester hours and include the following four courses in political science: 44.120, 44.160, 44.210, and 44.280.

Elective Courses

Select a total of 18 semester hours, 12 semester hours of which must be accrued from upper division courses, i.e., at the 300 level or above.

Minor in Political Science

A total of 18 semester hours is required for a minor in political science. There are no required courses. Students should consider building a minor around one of the four sub-fields of political science, namely, U.S. Government, Comparative Government, International Politics, and Political Theory.

Political Science (Code 44)

44.101 Elements of Political Science (3) — Uses the procedures of political science to study power and examines the processes of politics and the practices of governments, the performance of and the pressures on the political system. For non-majors.

44.108 Contemporary Political Ideologies (3) — An introduction to those political beliefs that shape contemporary politics: nationalism, liberalism, conservatism, capitalism, socialism, feminism, religious fundamentalism, populism.

44.120 United States Government (3) — Introduces government and politics in the United States, emphasizing constitutional development, political development, civil rights, parties, elections, pressure groups, the Congress, the president, courts, and contemporary problems, such as foreign affairs, defense, inflation, unemployment, energy, and poverty.

44.160 Nations, States, and Governments (3) — Presents a comparative study of the governance of countries or nation-states in selected

developed and less developed regions of the world.

44.181 Contemporary Issues in World Politics (3) — An introduction to international politics through an examination of such critical problems as war and peace, East-West relations, nuclear disarmament, nation-building, and revolution.

44.207 Ethics, Politics, and Public Policy (3) — Examination of normative, descriptive, and metaethical approaches employed by politicians and policymakers in confronting issues of responsibility and choice in public programs and policies. Focuses on ethical problems and responses in civic life and emphasizes the ways alternatives impact on society.

44.210 Introduction to Political Theory (3) — An introduction to fundamental political concepts such as liberty, justice, equality, power, and authority, as well as the main ideas of some representative political philosophers from Socrates to the present.

44.244 Introduction to Criminal Justice (3) — Provides students with a comprehensive survey and basic understanding of the role and function of the criminal justice field. Focuses on crime and criminal law, the police, law enforcement, courts, corrections, and juvenile justice.

44.280 Introduction to International Relations (3) — Examines sources of international conflict and cooperation, power politics in the international arena, problems of collective security, the settlement of disputes, diplomacy, revolution, and international law.

44.303 Politics and the Arts (3) — Surveys painting, music, films, poetry, and novels to show the relationship between these media and political concepts, philosophies, and problems.

44.322 Political Violence (3) — Surveys individual, group, and mass political violence, concentrating on causes and manifestations. Studies positive and negative effectiveness of political violence with the object of placing the phenomena in meaningful historical and contemporary contexts.

44.326 Parties, Groups, and Public Opinion (3) — Examines the development of political parties in the United States; elections, voter behavior, and political participation; and the role of interest groups and political propaganda.

44.331 Legal and Political Aspects of Business (3) — Describes and analyzes the legal environment surrounding business, concentrating

on the role of government, especially the courts, in affecting business relationships. The impact of administrative regulatory agencies and government policies, such as affirmative action, are analyzed.

44.336 Public Administration Theory (3) — Includes leadership/followership and motivation/manipulation propositions on personnel management; conflict, competition, and cooperation propositions about budgeting; and information-communication propositions in relation to planning.

44.363 Soviet and Post Soviet Politics (3) — Studies the history, development, ideology, institutions, and policies of the Soviet political system.

44.366 Political Systems of Western Europe (3) — Examines democracy as practiced in Western Europe; the politics and government of Great Britain, France, and Germany; comparisons with the United States; principles of comparative analysis.

44.371 Political Systems – Africa (3) — Examines problems of newly independent states, the struggle for independence, attempts to create national unity and create political stability, economic and political development, the role of the military in politics, and politics in the Republic of South Africa.

44.373 Government and Politics in China and India (3) — Studies politics and government in selected states with an emphasis on the forces which shape domestic and foreign politics and processes.

44.375 Multiculturalist Theory (3) — Treats the issues of concern generated from an attention to and appreciation of our diverse cultural identities. As a theory course, it approaches multiculturalism as a new attempt to respond to the challenges that difference poses in democratic theory. A combination of theoretical, empirical and participatory methods are used.

44.376 Government and Politics of the Middle East (3) — Introduces the political history and governments of particular states in the region and considers their interactions regionally and internationally. Considers in particular the importance of Islam in politics, the Arab-Israeli conflict, the Iranian revolution, the Iraqi wars.

44.377 Feminist Political Theory (3) — Explores various strands of feminist political thought and approaches to philosophical critique. The primary aim of the course is to fa-

miliarize students with the contributions made by feminists to the field of political theory and to provide students with the basic tools with which to read, understand, critique and write in acknowledgement of these contributions.

44.405 Development of Political Thought (3) — A chronological survey from the ancient Greeks to the present. Examines the ideas of seminal political thinkers as they grapple with perennial problems.

44.409 American Political Thought (3) — Analyzes the relationship of American political thought to contemporary political science by using traditional materials in a historical, chronological way but reworking them to show their relation and relevance to actions and institutions. Includes the main ideas of the leading political thinkers in America from the colonial period to the present.

44.412 Scope, Approaches, and Methods of Political Science (3) — Analyzes the various approaches and methods currently in use in political science.

44.437 Public Administration Applications (3) — Uses readings, cases, and simulations and requires a term paper based on a government agency's data.

44.438 Public Personnel Administration (3) — Public service as a career; personnel needs of national, state, and local governments; civil service law; personnel systems; and current problems.

44.440 The President and Congress (3) — Reviews presidential and congressional politics, public policy-making roles, executive-legislative relationships, and constitutional issues. Examines problem areas and proposals for reform.

44.446 Constitutional Law I (3) — Analyzes the evolution, structure, and function of the Supreme Court, concentrating on a case-study approach to the court's interpretations of the powers of the president, Congress, and federal-state relationships.

44.447 Constitutional Law II (3) — Studies decisions of the Supreme Court as they relate to the individual and the government, concentrating on nationalization of the Bill of Rights, rights of persons accused of crime, equal protection, and voting rights.

44.448 The Judicial Process (3) — Studies policymaking by the federal courts, primarily the Supreme Court. Analyzes the nature of the policymaking function as well as the impact of policy-making on American society.

44.452 State and Local Government Politics

(3) — Presents a description and analysis of state and local legislatures, executives, and judiciaries, the myths and realities of state and local politics, intergovernmental relations, current policies, and problems.

44.456 Public Policy (3) — Studies the institutional and political context of policy formation and implementation; the process for designing and administering government programs; and the techniques of analysis and evaluation that are or could be employed in formulating policy objectives, choosing from among alternatives, and assessing performance. The approach is pragmatic, applied, and interdisciplinary.

44.458 U.S. Foreign Policy (3) — Analyzes the substance, methods, and purposes of U.S. foreign policy including the determinants of policy, policymaking machinery, and implementation matters.

44.464 Government and Politics of Ireland (3) — A survey of historical, social, cultural, and religious developments in Ireland with concentrated study of the government and politics of Northern Ireland and the Irish Republic. Examines contemporary literature, drama, music, and art.

44.487 International Law and Organization (3) — Presents the theoretical and practical implications of the legal and organizational efforts to regulate international relations with emphasis on international law, the United Nations, the International Court of Justice, and regional and functional organizations.

44.490 Independent Study in Political Science (1-6) — Provides for individualized reading, research, and reporting under conditions of minimal supervision. Projects must have departmental approval and be underway by the end of the first week of a session.

44.492 Seminar in Government and Politics (3) — Examines problems in government and politics in an attempt to review and unify theories and methods of political science. Emphasizes individual research projects.

44.497 Internship in Political Science (1-15) — Provides for on-site work experience and training designed to give an opportunity to apply the theoretical and descriptive knowledge acquired in the classroom, or the "Field Experience" course, to the political, legal, organizational, and administrative operations of contemporary institutions. The student is supervised by an instructor and an on-site person. A paper is required.

Department of Psychology

Faculty

Michael W. Gaynor, Chairperson, Professor —

B.A., Muhlenburg College; M.S., Lehigh University; Ph.D., Colorado State University

John S. Baird Jr., Professor — B.A., University of Virginia; M.S., Ph.D., North Carolina State University

Brett L. Beck, Associate Professor — A.A., James H. Faulkner State Junior College; B.A., University of West Florida; Ph.D., University of Alabama

Kambon Camara, Assistant Professor — B.S., Florida A & M University; M.S., University of Wisconsin-Stout

Winona J. Cochran, Professor — A.S., Dalton Junior College; B.S. University of Tennessee; M.S., Ph.D., University of Georgia

Steven L. Cohen, Professor — B.A., Oakland University; Ph.D., University of Maine

James H. Dalton, Jr., Professor — B.A., King College; M.A., Ph.D., The University of Connecticut

Julie M. Kontos, Assistant Professor — B.A., M.S., Ph.D., University of Georgia

L. Richard Larcom, Associate Professor — B.S., M.A., Ph.D., The Ohio State University

Marion G. Mason, Assistant Professor — B.S., Southern Nazarene University; M.A., Ph.D., The Ohio State University

Alex J. Poplawsky, Professor — B.S., University of Scranton; M.S., Ph.D., Ohio University

Constance J. Schick, Professor — B.B.A., Angelo State University; Ph.D., Texas Technological University

Eileen C. Astor-Stetson, Professor — A.B., Douglass College-Rutgers University; Ph.D., Vanderbilt University

Joseph G. Tloczynski, Assistant Professor — B.A., Bloomsburg State College; M.A., West Chester University; Ph.D., Lehigh University

John E. Waggoner, Associate Professor — B.A., Shippensburg State College; M.S., Ph.D., The Pennsylvania State University

J. Calvin Walker, Professor — B.A., Muskingum College; Ed.M., Ed.D., Temple University

Degree Program

Bachelor of Arts in Psychology

A total of 36 semester hours is required for a major in psychology.

Goals and Objectives

The Department of Psychology is committed to providing a strong undergraduate program for psychology majors and minors and to providing support courses for the university's general education curriculum. All classes for the major are taught by faculty who have earned doctorates in their specialty. Students in the major are expected to demonstrate a firm grounding in basic statistics and in experimental methodology and research, thus allowing them to excel in advanced theory and content courses. A degree in psychology from Bloomsburg University gives quality students an appropriate background for graduate study and research in all areas of the discipline and also offers qualified students a broad range of career possibilities with the potential for employment in settings such as : hospitals, clinics, counseling centers, nursing homes, community human services agencies, educational institutions, research organizations, or businesses.

The program of study in psychology requires the courses specified below:

Freshman/Sophomore years: Core courses

(18 semester hours) 48.101, 48.160, 48.281, 48.282, and two courses from 48.211 or 48.212, 48.253, 48.311. Note: 48.281 and 48.282 must be taken concurrently.

Junior/Senior years: Content courses (12 semester hours) two courses from 48.360, 48.375, 48.380; one course from 48.335, 48.436; one course from 48.321, 48.340, 48.350, 48.356, 48.451, 48.453, 48.463, 48.476

Senior year: Capstone courses (6 semester hours): two courses from 48.341, 48.401, 48.406, 48.464, 48.466, 48.497

Minor in Psychology

A minimum of 18 semester hours in psychology as specified: 48.101, 48.160 (or Economics 40.346 or Sociology 45.260 or Mathe-

matics 53.141), 48.281, and 9 semester hours, 6 of which must be at the 300 or 400 level.

Psychology (Code 48)

48.101 General Psychology (3) — Studies psychology as a system of scientific inquiry into the nature and behavior of humans. Presents major concepts, principles, and processes concerned with human functioning in individuals and social settings.

48.131 Psychology of Adjustment (3) — Examines the personal and social meaning of adjustment. Presents an operational approach to mental health including such concepts as anxiety, frustration, conflict, aggression, and defense.

48.160 Basic Statistics (3) — Introduces fundamental statistical concepts and principles providing a foundation for research methodology for students who need not be mathematically inclined. Discusses computation, interpretation, and application of commonly used descriptive, correlation, and inferential statistical procedures for analyzing data.

48.210 Life-Span Psychology (3) — Examines the psychology of human development from conception to death. Discusses traditional topics and issues in developmental psychology such as cognition and personality, but within a life-span developmental perspective. *Prerequisite:* 48.101

48.211 Child Psychology (3) — Studies normal development and the interrelationships among various aspects of biological, cognitive, personality, and social factors. Emphasizes prenatal to adolescent development. *Prerequisite:* 48.101

48.212 Adolescence (3) — Studies developmental, personal, and social issues confronting adolescents as they emerge from childhood and strive for adulthood. *Prerequisite:* 48.101

48.251 Psychological Foundations of Education (3) — Examines principles of psychology as applied to the classroom. Emphasizes learning processes as affected by environmental, experiential, and developmental factors. *Prerequisite:* 48.101

48.253 Social Psychology (3) — Studies interpersonal behavior with emphasis on affiliation, interpersonal perception and attraction, group behavior and conformity, attitude change, and

compliance. *Prerequisite:* 48.101

48.254 Psychological Aspects of Social Issues (3) — Examines the application of psychological theories and techniques to existing social issues and their relationship to alternative ethical viewpoints regarding social issues selected by the instructor for study. *Prerequisite:* 48.101

48.281 Experimental Psychology: Methodology (3) — Introduces experimental design, statistical analysis, and issues of control and confounding. Surveys classical and learning experimentations as well as issues in social, developmental, educational, and clinical psychology from an experimental perspective. *Prerequisites:* 48.101 and 48.160 (*with a minimum grade of C in each*)

48.282 Experimental Psychology: Applications (3) — Surveys the application of designs and statistics to problems encountered in psychology. Addresses ethical issues in experimentation, the value of experimentation, and the limitations of research designs. Emphasizes discussion and application of various research strategies to contemporary and traditional problems in psychology. *Prerequisites:* 48.101 and 48.160 (*with a minimum grade of C in each*), and 48.281 or concurrently taking 48.281

48.311 Adulthood and Aging (3) — Studies the development of adults in our culture. Includes topics on the effects of social environment on aging, special problems of aging, sex differences during adulthood, vocational, marital, and familial developments, and psychology of death and dying. Emphasizes human behavior between young adulthood and senescence with emphasis on the aging process. *Prerequisite:* 48.101

48.321 Psychological Tests and Measurements (Fall) (3) — Introduces the logic of psychological measurement including the applied and practical aspects of psychological testing with emphasis on reliability, validity, and test norms. Provides background for test evaluation. *Prerequisite:* 48.101, 48.160, or consent of the instructor

48.335 Abnormal Psychology (Spring) (3) — Surveys the description, causation, prevention, and treatment of maladaptive behavior, as well as the ethical aspects of these issues. Considers biological, psychological, and social factors. *Prerequisites:* 48.101, 48.160, 48.281 or consent of the instructor

48.340 Community Psychology (Spring) (3) — Examines concepts, research and interventions regarding psychological well-being and empowerment of individuals in community context and the relationship of these to the psychological sense of community. *Prerequisites: 48.101, 48.160 and 6 semester hours in psychology*

48.341 Theory and Practice of Academic Psychology (3) — Sharpens and expands knowledge of the basic principles of psychology. Provides an intensive review of the content taught in General Psychology and requires students to lead discussion groups. *Prerequisites: Junior standing; 48.101, 48.160, 48.281, 48.282 and consent of the instructor*

48.350 Psychology of Sex and Gender (3) — Examines the theoretical and research issues in psychological experiences of males and females. Views gender role development and implications for the daily lives of men and women from historical, biological, psychoanalytic, learning, sociological, and anthropological perspectives. *Prerequisites: 48.101, 48.160, and 48.281*

48.356 Psychology of Motivation (Fall) (3) — Surveys the fundamental determinants of human and animal activities. Studies theories, research methodologies, and experimental evidence related to the activation and the direction of behavior. *Prerequisites: 48.101, 48.160, 48.281 or consent of the instructor*

48.360 Cognitive Psychology (Spring) (3) — Examines the major theoretical perspectives and research in the area of cognition and presents the ways in which mental processes such as memory, perception, language, and problem solving may be empirically studied. *Prerequisites: 48.101, 48.160, and 48.281*

48.375 Psychology of Learning (Fall) (3) — Examines the theoretical and experimental bases of learning in animal and human behaviors. Studies situational and drive factors affecting learning, stimulus generalization, and discrimination, retention, and forgetting. *Prerequisites 48.101, 48.160, 48.281, 48.282, or consent of the instructor*

48.380 Physiological Psychology (Spring) (3) — Studies the relationship between psychological processes and physiological activity. Reviews neurological and biochemical bases of behavior with emphasis on the synergistic functions of the nervous system, sense organs, and glandular system. *Prerequisites: 48.101, 48.160,*

48.281, 48.282, or consent of the instructor

48.401 History of Psychology (3) — Studies the historical development of modern psychology and compares present-day models of behavior within an historical framework. *Prerequisites: 48.101 and Junior standing*

48.406 Psychology Seminar (3) — Provides for an advanced consideration of significant topics in psychology. Requires reports and discussions of current research and may be repeated with change in topic. *Prerequisites: 48.101 and consent of the instructor*

48.436 Theories of Personality (Fall) (3) — A critical study of theories explaining development, structure, and organization of personality. Considers personality from psychoanalytic, social, individual, self, and learning points of view. *Prerequisite: 48.101, 48.160, 48.281, or consent of the instructor*

48.439 Introduction to Clinical Psychology (Spring) (3) — Surveys clinical psychology and the role of the clinical psychologist in community and hospital mental health programs, clinical assessment, and diagnosis. Examines concepts in and models of psychotherapy. *Prerequisites: 48.101, 48.335 or 48.436, or consent of the instructor*

48.451 Laboratory Training in Group Processes (Spring) (3) — Offers on-going experience on topics including norm-setting, leadership, problem solving, role playing, cooperation/competition, and decision making. Class size limited to 20 students. *Prerequisites: 48.101 and consent of the instructor*

48.453 Organizational Psychology (Spring) (3) — Describes the application of psychological theory and research to the study of industrial, business, profit and nonprofit service, military, and governmental organizations. Emphasizes the interaction of individual perceptions, group dynamics and organizational climates, and strategies to maximize the satisfaction and effectiveness of each component within and between complex organizations. *Prerequisites: 48.101, 48.253, and consent of the instructor*

48.463 Personnel Psychology (Fall) (3) — Surveys behavioral principles, techniques of investigation, recent research literature, and practice in the application of psychological knowledge relevant to a wide range of personnel management problems. Considers the impact of the EEO guidelines for personnel manage-

ment in the areas of recruitment, selection, promotion, training, and performance appraisal. *Prerequisites: 48.101, 48.160 or 40.346 and Junior standing (48.321 recommended)*

48.464 Advanced Experimental Design (3) — Presents an advanced consideration of the planning, conduct, and evaluation of research in the behavioral and biological sciences, employing parametric and nonparametric statistics. Emphasizes inferential statistics, design, analysis, interpretation, and computer utilization. *Prerequisites: 48.101, 48.160, 48.281, 48.282, or consent of the instructor*

48.466 Independent Study in Psychology (3) — Provides for the study of a topic via review

and research of technical psychological literature or empirical manipulation of variables in the field or laboratory under supervision of a psychology faculty member. Documents results in a written report. *Prerequisites: Consent of the instructor and departmental approval*

48.476 Principles of Behavior Modification (3) — Studies the application of learning principles to change behavior in both individual and group settings. *Prerequisite: 48.101 and 6 semester hours in psychology*

48.497 Practicum in Psychology (1-15) — Provides application of psychological knowledge through study, observation, and practice in a community setting. May be repeated for a total of 15 semester hours. *Prerequisite: Consent of the instructor*

Radiological Technology

Program Coordinator: James E. Cole, professor, Department of Biological and Allied Health Sciences

Program Adviser: Casey A. Shonis, assistant professor, Department of Biological and Allied Health Sciences

Degree Program

Bachelor of Science

Goals and Objectives

The programs in allied health sciences encompass health areas in which individuals support, aid, and increase the efficiency and effectiveness of other health professionals by becoming a contributing member of a health care team. These programs combine natural science and liberal arts education with clinical instruction. In general, students who complete any of the programs enter their professions immediately. Others may select postgraduate education in health care. Central to most allied health programs, especially the clinical portion, is satisfactory completion of the clinical standards, often referred to as the Essentials. These standards establish requirements related to curriculum, personnel, financing, resources, and records.

Program of Study

Radiological technologists are allied health professionals who have expertise in the operation of X-ray equipment and the preparation of patients for various diagnostic procedures. Many clinically educated technologists pursue a variety of careers, often in managerial or teaching roles within their disciplines. In order to meet the varying needs of radiological technologists, the program offers a means of

entering Bloomsburg at an advanced entry level and allows students to select a group of courses comprising either a management emphasis or an education emphasis.

Students entering at this advanced level are awarded 30 to 60 semester hours for satisfactory completion of an AMA-approved program and the passing of the ARRT examination. It is assumed that many advanced level students will be part time and will require more than two years to complete the program. The required third and fourth year courses comprise an allied health core similar to that taken by other allied health majors. Although advanced entry is most common, other academic pathways exist for this program. For details, students should contact their adviser.

Professional Courses

Biological and Allied Health Sciences 50.173 and 50.174 followed by 4 semester hours required elective in biology; Chemistry 52.101; Physics 54.107; Psychology 48.101, 48.160 or Mathematics 53.141; and Computer Science 56.110 or Computer and Information Systems 92.150.

Emphasis Courses

Select an emphasis in either management or education, both require a total of 15 semester hours in courses:

Management Emphasis — General Business 90.101, Accounting 91.220; Management 93.344, 93.345, and 93.346 or 93.445 or 91.498 (Special Topics, Intro to Health Care)

Education Emphasis — Educational Foundations 60.204, 60.251, 60.291, 60.311, and 60.393.

Department of Sociology and Social Welfare

Faculty

1. Sue Jackson, Chairperson, Associate Professor; A.B., Lycoming College; M.S.S.W., Graduate School of Social Work, University of Texas

Charles W. Lauderlitch, Associate Professor; B.A., Moravian College; M.S.W., Wayne State University

Martin L. Needleman, Assistant Professor — B.A., University of Texas at Austin; M.A., Ph.D., State University of New York at Buffalo

Dale L. Sultzbaugh, Associate Professor; B.A., Gettysburg College; M.Div., Lutheran Theological Seminary; M.S.W., West Virginia University

Degree Program

Bachelor of Arts in Social Welfare

A total of 46 to 54 semester hours is required for a major in social welfare.

Goals and Objectives

The Department of Sociology and Social Welfare offers a baccalaureate degree in social welfare which is accredited by the Council on Social Work Education. The primary program objective is to prepare students for the beginning level of professional social work practice with individuals, families, groups, organizations, and communities. The curriculum integrates basic social work knowledge with a liberal arts perspective.

Required Courses

Required courses for this degree program include: Social Welfare 45.133, 45.297, 45.334, 45.450, 45.452, 45.453, 45.497, 45.498, 45.211, 45.215, 45.260, 45.462, and 45.466; Biological and Allied Health Sciences 50.101; Economics 40.211; Political Science 44.120; Psychology 48.101 and 48.210, plus one additional three credit course in psychology.

For information about admission criteria and details on the course sequence, please see Dale L. Sultzbaugh, director of the social welfare program.

Social Welfare (Code 45)

45.133 Introduction to Social Work and Social Welfare (3) — An orientation to the profession of social work and field of social welfare. Includes an examination of historical and current social work processes, values, and practices in various settings and with special population groups.

45.236 Child Welfare (3) — Examines child welfare services, issues, and the institutions which affect the social functioning of children. *Course is not in the social welfare degree program.*

45.297 Introductory Practice Experience in Social Welfare (3-6) — Exploratory practice experience for students considering a social welfare major. Provides an overview of the agency system under the direction of a practice supervisor. *Prerequisite: 45.133*

45.334 Social Work Practice with Individuals and Families (Fall) (3) — Examines several orientations to problem solving with individuals and families. Emphasizes the essential knowledge, values, and interviewing skills for beginning social work practice. *Prerequisites: 45.133, 45.211, 45.215, 45.297; Psychology 48.101, 48.210; Biology 50.101*

45.450 Social Work Practice with Small Groups (Fall) (3) — Uses problem-solving interventions in small groups integrating social work knowledge, skills, and values. *Prerequisites: 45.133, 45.211, 45.215, and 45.297; Psychology 48.101, 48.210; Biology 50.101*

45.451 Family Counseling (3) — Surveys major theoretical models for family assessment and intervention with primary emphasis on ecological systems. Working knowledge of rudimentary assessment and intervention skills for problem solving with families acquired. Course is not in the social welfare degree program.

45.452 Social Work Practice With Organizations and Communities (Spring) (3) — Examines problem-solving interventions with large groups, communities, and organizations using

the conceptual framework of social work knowledge, skills, and values. *Prerequisites: 45.133, 45.215, and 45.297; Economics 40.211; Political Science 44.120*

45.453 Social Welfare Policy (Spring) (3) — Frameworks for analyzing social and economic policies presented with special focus on legislative, judicial, and administrative policies. *Prerequisites: 45.133, 45.215, and 45.297 (may be taken concurrently); Economics 40.211; Political Science 44.120*

45.497 Social Welfare Internship (10-15) — Provides the social welfare major with the opportunity to integrate and apply knowledge, theory, and understanding extracted from the foundation courses. Fosters skill development and evaluates the demonstration of beginning

competencies in working with individuals, families, groups, organizations, and communities. 45.466 and 45.498 may be taken concurrently. *Prerequisites: 45.133, 45.215, 45.260, 45.297, 45.334, 45.450, 45.452, and 45.453; Economics 40.211; Political Science 44.120; Psychology 48.210*

45.498 Integrative Methods Seminar in Social Work and Social Welfare (3) — An examination of social work practice from a system theory perspective and its functional relevance to contemporary social problems. Internship and other practice experiences are critical elements in this review course. Course is taken concurrently with or after the social welfare internship. *Prerequisites: 45.133, 45.215, 45.260, 45.297, 45.334, 45.450, 45.452, 45.453, and 45.466 and 45.497 (both may be taken concurrently); Economics 40.211; Political Science 44.120; Psychology 48.210*

Department of Sociology and Social Welfare

Faculty Credentials

- I. Sue Jackson, chairperson, Associate Professor; A.B., Lycoming College; M.S.S.W., Graduate School of Social Work, University of Texas
 Christopher F. Armstrong, Professor; B.A., Washington and Lee University; M.A., Ph.D., University of Pennsylvania
 Leo G. Barille, professor; B.A., M.A., Ph.D., Boston College
 James H. Huber, Professor; B.S., Bloomsburg State College; M.A., University of Delaware; Ph.D., The Pennsylvania State University
 Frank G. Lindenfeld, professor; B.A., Cornell University; M.A., Ph.D., Columbia University
 Chang Shub Roh, Professor; B.A., Dong-A University; C.S.W., M.S.W., Ph.D., Louisiana State University
 Anne K. Wilson, Professor; B.A., Carleton College; M.S., University of Maryland; Ph.D., The Johns Hopkins University
 David E. Greenwald, Associate Professor; B.A., University of Pennsylvania; M.A., Ph.D., University of California at Berkeley

Degree Program

Bachelor of Arts in Sociology or Sociology/Criminal Justice

A total of 36 semester hours is required for a major in sociology.

A total of 42 semester hours is required for a major in sociology/criminal justice.

Goals and Objectives

Designed to give students a firm liberal arts education in sociology, this program exposes students to the theoretical concepts and research methods of the field, introduces them to computer data analysis, and prepares them for graduate study. The program provides students the opportunity to explore the causes of social problems with respect to race, class, gender, crime, the political economy, age, health, work, punishment, victimization, and deviance. Students are encouraged to think critically about the structure and dynamics of social groups, institutions, ideology, and the society.

Required Courses

The following courses (12 semester hours) are required for this major: Sociology 45.211, 45.260, 45.462, and 45.466. Students also must select eight additional courses, 24 semester hours, from Code 45 courses ; four of these must be drawn from 300 and 400 level courses. The sociology internship and social work courses may not be counted as part of these eight courses.

Option in Criminal Justice

Students who wish to channel their education in sociology more specifically toward a career in criminal justice may choose the option in criminal justice. Through the sociology/criminal justice sequence, students are exposed to justice, enforcement, and corrections systems, investigation, and victim's services. A total of 42 minimum semester hours is required for this option; this includes the four core courses (Sociology 45.211, 45.260, 45.462, 45.466) stipulated for the major in sociology. A G.P.A. of 2.3 is required to remain in the criminal justice option.

Required courses are: 45.211, 45.242, 45.244 or Political Science 44.244, 45.260, 45.341, 45.342, 45.343, 45.462, 45.466, 45.496, and three of the following courses: 45.133, 45.334, 45.215, 45.213; 45.443 or 45.318 or 45.418; 45.316. The Sociology Internship Program (45.496) accounts for 6 to 15 semester hours. Internships which can be at local, state or federal agencies, or private institutions, provide first-hand experience in the field.

Sociology and Criminal Justice (Code 45)

45.211 Principles of Sociology (3) — Introduces the basic concepts, theories, and perspectives in sociology. Sociology is the scientific study of the influence of groups, institutions, and cultures upon individuals. For example, the extent to which race, gender, class, religion, and education affect the behavior and opportunities of individuals is probed.

45.213 Contemporary Social Problems (3) — Examines social issues such as plant closings and unemployment, the impact of multinational corporations on the economy and the environment, mobility, aging, family problems – sex roles, abuse, incest, divorce, alcohol and drug abuse, social change and disorganization, racism, sexism, employment discrimination, crime, alienation, and poverty.

45.215 Racial and Ethnic Minority Groups (3) — Presents a sociological examination of some of the major racial, ethnic, and religious minorities and their divergent heritages in the contemporary American scene. *Prerequisite:* 45.211

45.217 Sociology of Sport (3) — An introduction to and critical examination of the role of sports in society. Focuses on the reciprocal impact of sports and various institutions of society. Students examine the sociological perspective on sports as a human activity.

45.231 Marriage and Family (3) — Provides a sociological examination of the traditional and changing institutions of marriage and the family in contemporary society. Focuses on family and marital interaction, roles, and interpersonal/familial relations.

45.242 Juvenile Delinquency (3) — Examines social pressures operative upon children in American society, which leads to formation of delinquent personality. Consideration of treatment and prevention, juvenile courts, clinics and correctional institutions, evaluation of theories, concepts, and relevant empirical research.

45.244 Introduction to Criminal Justice (3) — Offers a comprehensive survey and basic understanding of the role and function of the criminal justice field. Attention is given to crime and criminal law, law enforcement, police, courts, corrections, and juvenile justice.

45.260 Basic Social Statistics (3) — Presents principles and techniques of statistical analysis used by sociologists and others in social sciences: descriptive tables and graphs, measures of dispersion, significance tests, correlation, and regression. Students collect and analyze data using computers. Emphasis on understanding concepts underlying statistical analysis in order to permit intelligent use and interpretation of statistics.

45.316 Urban Sociology (3) — Presents a sociological analysis of origin and growth of cit-

ies with an emphasis on the dynamic patterns of social interaction in the changing contemporary urban scene. Views cities mainly from a multinational perspective with a special focus on urban regions. *Prerequisite:* 45.211

45.318 Social Stratification (3) — Examines the role of social class in terms of structure, function, and persistence in any society. Examines classical theoretical statements and evaluates current American class relations in terms of status, power, authority, and social mobility. Covers notable studies of the American class system and provides a close look at power relations and styles of life among the various American classes. *Prerequisite:* 45.211

45.319 Religion and Society (3) — Examines religion as a means by which people, as members of communities, order their lives and endow them with meaning. Topics include ritual and belief systems, the social organization of religion, and the relationship between religion and other parts of the social structure.

45.342 Penology (Spring) (3) — Penology studies the social rationales, methods, and consequences of punishing and rehabilitating law breakers. Includes a social history of prisons, jails, and punishment, the interpersonal dynamics within the institution, the inmate social order, causes of riots, treatment programs, and alternative models and policies. *Prerequisite:* 45.211

45.343 Victimology (Spring) (3) — Examines the short-term and long-term effects of victimization on individuals and groups from such crimes as family violence, rape, street crime, business fraud, corporate negligence, and political wrong doings. *Prerequisite:* 45.211

45.345 Medical Sociology (3) — Facilitates student's ability to understand, analyze, and evaluate sociological factors in relation to illness, medical behavior, and health care systems. *Prerequisite:* 45.211 or consent of instructor

45.376 Science and Society (3) — Explores science as the organized activities of an occupational community. Examines the development of science as an institution, its social organization in modern society, and its internal and external politics. *Prerequisite:* 45.211 or consent of instructor

45.400 Sociology of Mass Communication (3) — An in-depth discussion of the cognitive and behavioral affects of mass media, especially

television on audiences, the social structure of the communications industry, particularly its influence on media content, and the political use of mass media. Students critique latest research articles in the field. *Prerequisites: 45.211 and Junior status*

45.441 Social Indicators (3) — Attempts to reinforce and extend earlier learning in research techniques and methods by focusing upon systematic, step-by-step understanding, analysis, and preparation of social indicators at the federal, state, and local levels of social policy planning. Promotes understanding of social indicators and the use of these indicators within all levels of society.

45.443 Sociology of Deviant Behavior (Fall) (3) — Evaluates the presence and function of deviance in society. Includes mental illness and various types of crime and stigmatized behavior. Examines how it is handled therapeutically and legally through institutionalization and treatment. Attempts to provide a broad theoretical perspective as well as concrete examples of deviance in any society. Examines current methods of rehabilitation and punishment. *Prerequisite: 45.211*

45.457 Sociology of Community (3) — Reviews and examines theories and research of communities. Gives special emphasis to the American community. *Prerequisite: 45.211*

45.461 Social Problems in Rural-Urban Communities (3) — Focuses on social problems peculiar to and characteristic of rural and small urban communities. An eclectic theoretical interpretation will be made of the major social problems. Emphasizes problems which result in the dysfunctioning of patterned social relationships.

45.462 Sociological Theory (3) — Examines classical forms of social theory from the 19th century and their impact on the development of theory in the 20th century. Studies the views of Max Weber, Emile Durkheim, and Karl Marx on the social structure, social organization, economy, and human condition as well as their influence on contemporary perspectives, namely, the conflict and functional approaches, sociology of knowledge, phenomenological sociology, and symbolic interactionism. *Prerequisite: 45.211*

45.465 Computer Applications in the Social Sciences (Spring) (3) — Introduces computer use for the social sciences (through the use of

SPSS). Emphasizes translating questions into data analysis and interpretation of statistical results. *Prerequisites: 45.260, 45.466, or consent of the instructor*

45.466 Social Research (3) — Stresses design and construction of major research methods and procedures used in social research. Special emphasis on survey research. *Prerequisites: 45.211, 45.260 or consent of the instructor*

45.467 Populations Problems (3) — Studies human population, its major theories, distributions, composition, characteristics, changes, and future developments of population and impacts of population problems on society as influenced by vital processes. *Prerequisite: 45.211*

45.468 Social Service Planning (3) — Provides an advanced consideration of the social context and the development of social policy and planning. Stresses the implementation of social and/or human services at federal, state, and local levels of organization. A critical analysis of the effects of social policy, planning, and services on people in a service-oriented, post-industrial society. *Prerequisites: 45.211 and consent of the instructor*

45.470 Senior Seminar (3) — Provides for individual research projects and reports within selected areas of interest such as the family, criminology, social services, and special populations. Usually offered in the spring semester. *Prerequisites: Senior status; 18 semester hours of sociology and social work; and consent of the instructor*

45.471 Independent Study in Sociology (3) — Allows student to pursue individualized instruction in-depth with a faculty member in a specific area of the field not covered in current courses. See section on Independent Study on page 10. *Prerequisites: 45.211 and consent of instructor, chairperson, and members of the department*

45.474 Contemporary Environmental Issues (3) — Examines some major human problems that lead to environmental deterioration, particularly water, air, and noise pollution, energy and other resource depletion, and increasing population density. *Prerequisite: 45.211*

45.477 Community Land Use Planning (3) — Introduces the community planning process and the theoretical perspectives relevant to community land use planning. Examines selected substantive planning problem areas in

the local community. Students formulate, develop, and present a community land use plan. *Prerequisite: 45.211*

45.478 Sociology of Work (3) — Presents a sociological examination of work and the milieu of the worker. Studies formal and informal work organizations, job satisfaction and dissatisfaction, structure and organization of industrial and post-industrial societies, and relationship between work organizations within communities and society. *Prerequisite: 45.211*

45.490 Sociology of Aging (3) — Studies aging, its major theoretical themes, patterns of living, socio-psychological, and cultural consequences. Examines the contemporary issues, problems, and programs of the aging. *Prerequisite: 45.211 or consent of instructor*

45.496 Sociology Internship Program (1-15) — Designed primarily for the junior or senior working in a specific institutional field and/or college-approved, off-campus activities related to student's chosen professional field. *Prerequisites: Consent of the instructor and department chairperson*

Department of Communication Disorders and Special Education

Faculty

- Carroll J. Redfern, Chairperson, Professor — B.S., Johnson C. Smith University; M.Ed., Bloomsburg State College; Ed.D., Lehigh University
- Arthur R. Crowell, Associate Professor — B.S., M.S., Southern Connecticut State University; Ph.D., The University of Connecticut
- Mary B. Hill, Professor — B.S., Bloomsburg State College; M.Ed., University of Delaware; Ph.D., Temple University
- Kenneth P. Hunt, Professor — B.S., M.Ed., State University of New York at Buffalo; Ph.D., University of Pittsburgh
- Sheila D. Jones, Assistant Professor — B.S., M.Ed., Bloomsburg University; Ed.D., University of Missouri
- Michael J. Karpinski, Assistant Professor — B.S., M.Ed., Bloomsburg University; Ph.D., University of Maryland
- Ann L. Lee, Associate Professor — B.S., M.Ed., Bloomsburg State College; Ed.D., Indiana University of Pennsylvania
- Cynthia N. Schloss, Assistant Professor — B.S., Illinois State University; M.S., Ph.D., Southern Illinois University-Carbondale
- Joseph M. Youshock, Professor — B.S., M.Ed., Bloomsburg State College; Ed.D., Temple University

Degree Program

Bachelor of Science in Education—Special Education

A total of 51 semester hours is required for a major in special education.

Goals and Objectives

The program in special education offers certification for teachers of the mentally retarded and/or physically handicapped individuals; an area of concentration for the education of students in hearing impaired; and the courses and experiences which support these curricula.

Students enrolled in special education have the opportunity to student teach in the following settings: public schools, state centers, approved private schools, preschool settings, and adjudicated environments. Placements are in Columbia, Cumberland, Dauphin, Lackawanna,

Luzerne, Lycoming, Montour, Northumberland, Snyder, and Sullivan counties.

Required General Education Courses

The following courses are required for teaching mentally and/or physically disabled individuals: English 20.101, 20.104, 20.200 or 20.201; Speech Communication 25.103 or 25.104; Psychology 48.101, 48.210; Biological and Allied Health Sciences 50.101; Mathematics 53.141 or Psychology 48.160.

Required Professional Education Courses

Courses in professional education include: Health, Physical Education and Athletics 05.321; Educational Foundations 60.251 or Psychology 48.251; Educational Foundations 60.393 or 60.394; Early Childhood and Elementary Education 62.302 or 62.390, 62.371, 62.398, and 62.373 or 74.205 (reserved for Deaf/Hard of Hearing area of concentration only).

Required Special Education Courses

Special Education courses include: Special Education 70.101, 70.202, 70.206, 70.240, 70.251, 70.340, 70.353, 70.357, 70.401, 70.433, 70.450, 70.451, and 70.461.

General Education Courses

Core courses designated by the departments as applicable to the general education requirements may be elected in partial fulfillment of that requirement. Those majoring in teaching mentally and physically disabled individuals are required to take a minimum of 54 semester hours in General Education courses.

Students entering the university who have declared special education as their major are advised by faculty in the Department of Communication Disorders and Special Education. They begin taking courses in the major in the first semester of the freshman year and generally enroll in at least one special education course every semester thereafter. A typical schedule of courses is as follows:

Freshman Year

Fall Semester

70.101	Introduction to Exceptional Individuals General Education
<i>Spring semester</i>	
70.240	Foundations in Special Education
70.202	Technology for Exceptionalities
60.251	Psychological Foundations of Education
or 48.251	Psychological Foundations in Education General Education

Sophomore Year

Fall Semester

70.250	Behavior Disorders
70.206	Introduction to Early Intervention
	General Education

Spring Semester

70.340	Educating Individuals with Moderate/ Severe Disabilities
	General Education

Junior Year

Fall Semester

70.357	Prevocational and Vocational Education for the Handicapped
60.393	Social Foundations of Education
60.393	Social Foundations of Education
or 60.394	Education in Urban Society
62.398	Teaching of Mathematics in the Elementary School
62.302	Teaching Science in the Elementary School
	General Education
or 62.390	Teaching Social Studies in the Elementary School
	General Education Courses

Spring Semester

70.433	Language Arts for Students with Special Needs
70.450	Elementary Methods for Individuals with Mild Disabilities
62.371	Teaching Reading in the Elementary School
	General Education

Senior Year

Fall Semester

70.353	Assessment and Planning
70.451	Methods for Secondary Special Education
	Reading course
	General Education

Spring Semester

70.401	Student Teaching With Exceptional Individuals
70.461	Problems in Special Education

Adjustments are made in the above sequence of courses which reflect the needs of students who desire to take less or more semester hours of work than the average student. Transfers (internal and external), readmitted students, adult learners, and part-time students make it necessary to make adjustments in scheduling. Students who have the necessary requirements complete their student teaching the first semester and return to campus to complete their General Education requirements for graduation. Students who enroll in summer school could possibly graduate early or reduce the number of semester hours taken during the academic year. Students seeking dual certification (Special Education/Elementary Education or Early Childhood Education) often enroll in summer sessions.

Elective Courses

A total of 15 semester hours is taken in elective courses for this major. These courses include: 70.255, 70.256, 70.375; Speech Pathology and Audiology 72.152; Studies in Hearing Loss 74.153.

Special Education (Code 70)

70.101 Introduction to the Exceptional Individual (3) — Reviews all major areas of exceptionality (visually impaired, mentally retarded, hearing impaired, communication disorders, behavior disorders, learning disabilities) and acquaints the student with social, sociological, psychological, medical, historical, legal, economic, and professional aspects of these conditions. Reviews current research and the latest techniques for facilitating meaningful interactions with these individuals.

70.200 Introduction to the Mentally and Physically Handicapped (3) — An orientation to the nature of mental and physical handicaps; concerned with etiology and types and with the behavioral and learning characteristics involved. Exposes students to an historical survey of mental retardation, research in mental retardation, community and state responsibility in relation to the mentally and physically handicapped, prevention and treatment, educational and recreational avenues for the mentally and physically handicapped, and facets of the relationship and reactions of the individual and parent. *Note: this course will be deactivated in Spring, 1996.*

70.202 Technology for Exceptionalities (3) — Provides the special education major with an

introduction to technology as it is being applied to meet the needs of exceptional individuals and special education teachers. Computers, as well as other technological devices, are studied in relation to use as prosthetics, instructional tools, administrative tools (particularly Individualized Education Program generation and data management), and environmental interfaces.

70.231 Language I (3) — Aids the teacher in developing understanding of listening and speech processes, developmental and defective. Includes introduction to anatomy and physiology of speech and hearing mechanisms, developmental stages of language acquisition, etiological factors related to receptive and expressive deficits, and techniques for developing listening and speaking skills by the teacher.

70.250 Behavior Disorders (3) — Deals with inappropriate behaviors emitted by children and youth and the techniques and strategies that may be used to modify these behaviors. Covers psychological disorders, research related to aggressive and withdrawn behavior, and techniques and materials used in social curriculum. Examines group and individual problems at all school levels .

70.251 Learning Disabilities (3) — Presents its content in three units, a general overview, the central nervous system, and specific learning disabilities. Includes general characteristics of learning problems, their causes or related factors, the medical model, and specific language disorders and remediation. *Note: this course will be deactivated in Spring, 1996*

70.255 Experience with Exceptional Individuals (3) — Presents clinical or field experiences working individually or in small groups with exceptional individuals in various settings.

70.340 Educating Individuals with Moderate/Severe Disabilities (3) — Presents students with different theories and techniques used in the education of persons with moderate and severe disabilities. Students are also exposed to a variety of methods and materials and are provided with opportunities to create learning experiences for persons with moderate and severe disabilities.

70.353 Assessment and Planning (3) — Provides information and experience with formal and informal assessment devices and procedures, their usages and appropriateness. Cov-

ers gathering information about the learner prior to instruction concerning appropriate instructional tasks, sensory channels, interest areas, and social skills. Covers ways of developing informal assessments, gathering observational information, storing information, and planning for instruction. *Prerequisite: Junior or Senior standing*

70.356 The Mentally Gifted Individual (3) — Familiarizes students with educational needs and opportunities for the gifted and talented. Areas of emphasis include characteristics, identification/placement processes, effective educational strategies/materials and program options related to the mentally gifted. Current issues in the field of gifted education along with a brief historical background also addressed.

70.357 Prevocational and Vocational Education for the Handicapped (3) — Develop a philosophy of vocational education for persons with disabilities, acquire knowledge of programs and strategies to develop students' prevocational and vocational skills, learn information about and gain experience with curriculum materials and assessment procedures and develop strategies in transition planning.

70.375 Individual Project (3) — Planned according to interests and needs of the individual student, in any of the following suggested areas: library research, curriculum study, internship in special aspects of educational programs. *Prerequisite: Open only to Juniors and Seniors with staff approval*

70.401 Student Teaching With Exceptional Individuals (12) — Provides opportunities for the student to test educational theory by putting it into practice, opportunities to raise questions, problems and issues which may lead to advanced study, and opportunities for effective functioning in a pupil-teacher relationship in an actual classroom setting. *Prerequisite: Concurrent with 70.461*

70.433 Language Arts for Students with Special Needs (3) — Provides preservice teachers with a comprehensive overview of skills, assessment and strategies for teaching listening, speaking, reading and written expression. A holistic philosophy for teaching language arts is stressed. Students will prepare a portfolio of resources and best practices for teaching language arts to students with special needs.

70.450 Methods for Elementary Special Education (3) — Provides a summary of the learn-

ing characteristics and instructional needs of students with mild disabilities. Learning theory, effective teaching strategies, classroom management and interaction with parents, paraprofessionals and professionals will be discussed.

70.451 Methods for Secondary Special Education (3) — Familiarizes students with a variety of instructional techniques used to enhance the learning process of individuals with disabilities at the secondary level. Covers information pertaining to current issues in secondary special education and their impact on service delivery.

70.461 Problems in Special Education (3) — Presents instruction in the development of

constructive teaching of exceptional individuals. Focuses on problems in the education of exceptional children. Discusses its relationship to teaching as each problem is defined. Helps the future teacher meet practical problems in guiding the exceptional individual in learning experiences at school. *Prerequisite: Concurrent with 70.401*

70.490 / 70.491 / 70.492 Special Workshop (3) — Utilizes temporary special workshop seminars designed to focus on contemporary trends and problems in the field of special education lectures, resource speakers, team teaching, field experiences, practicum, news media, and related techniques.

Department of Communication Studies

Faculty

- Mary Kenny Badami, Chairperson, Professor — B.S., Fordham University School of Education; M.A., Hunter College; Ph.D., Northwestern University
- Dale A. Bertelsen, Associate Professor — B.S., Rider College; M.A., Ph.D., The Pennsylvania State University
- Janet Reynolds Bodenman, Assistant Professor — B.A., Willamette University; M.A., The Pennsylvania State University
- Timothy B. Rumbough, Assistant Professor — B.A., M.A., University of Central Florida; Ph.D., Florida State University
- Howard N. Schreier, Professor — B.A., Brooklyn College; M.A., University of Georgia; Ph.D., Temple University
- Kara Shultz, Assistant Professor — B.S., M.A., University of Northern Colorado; Ph.D., University of Denver
- Harry C. Strine III, Associate Professor — B.A., Susquehanna University; M.A., Ohio University
- James E. Tomlinson, Associate Professor — B.A., M.A., California State University at Long Beach
- Janice M. Youse, Assistant Professor — B.S., M.A., Temple University

Degree Program

Bachelor of Arts in Speech Communication

A total of 30 semester hours is required for a major in speech communication.

Bachelor of Science in Education with Communication Certification

Requirements for the Bachelor of Science in Education are found in the section on Secondary Education. This degree program offers a communication certification with a speech, theater or nonprint media option. Students in this degree program have an adviser in both the Curriculum and Foundations and the Communication Studies departments.

Goals and Objectives

This department includes both speech communication and theater divisions. The speech communication division supports general education for the entire university with courses

in public speaking, interpersonal communication, and intercultural communication.

Students who major in speech communication learn written and oral communication skills for use in a variety of settings. Those who expect to work in one-to-one and small group situations in business typically choose the specialization in interpersonal and organizational communication, while those who expect to deliver speeches and write for publication typically choose the specialization in public communication. The major has proved to be good career training for students who enter many fields of business, especially in jobs such as public relations, tour guide/public hospitality, personnel and training, fund raising, management, and sales. It is also excellent preparation for those who pursue graduate and professional study in order to enter such fields as teaching, law, politics, and ministry.

Required Courses

Ten courses, which total 30 semester hours, are required for the major. These include: 25.104, 25.215, and 25.315, plus 21 semester hours in one of the two options described below.

General Education Course

Public Speaking (25.103) is a required General Education course for students in this degree program.

Options

Students may choose an option in either interpersonal and organizational communication or in public communication — both options require 21 semester hours of coursework.

Interpersonal and Organizational Communication — The option in interpersonal and organizational communication requires three courses in basic theory and performance, three courses in advanced theory, plus 25.445 Organizational Communication. Basic theory and performance courses — 9 semester hours: select a minimum of three courses from: 25.206, 25.218, 25.220, 25.307 and 25.321. Advanced theory courses — 9 semester hours: select a minimum of three courses from 25.492, 25.493, 25.494, 25.495, and 27.332.

Public Communication — The option in public communication requires one course in vocal skills, two courses in basic theory and performance, three courses in advanced theory, plus 25.205 Rhetorical Theory. Vocal skills — 3 semester hours: 25.206. Basic theory and performance — 6 semester hours: select a minimum of two courses from 25.218, 25.220, 25.307, and 25.321. Advanced theory — 9 semester hours: select a minimum of three courses from 25.492, 25.493, 25.494, and 25.495.

Forensic Society — Students in the forensics program debate current topics, develop original speeches, and present readings at intercollegiate competitions. Team members compete locally, regionally, and nationally, and they help to organize tournaments sponsored by Bloomsburg University. Participants may earn up to one credit per year by taking 25.108 Forensics Practicum. Students from all majors are welcome to join the forensics team to improve their self-confidence, competence in research, knowledge of current events, appreciation of literature, and public presentation skills.

Speech Communication (Code 25)

25.103 Public Speaking (3) — A basic course in speech with emphasis on formal speaking and audience reaction.

25.104 Interpersonal Communication (3) — Analyzes one-to-one communication for developing and changing behaviors during interpersonal speech communication.

25.108 Forensic Practicum (0-1) — Participation in forensics: debate or individual speaking events. Grades are awarded each semester. May be repeated for maximum of 3 semester hours of credit. First semester register for 25.108.01. Second semester register for 25.108.02. Participation for two semesters for one semester hour of credit.

25.205 Rhetorical Theory (Fall) (3) — Highlights major trends in rhetoric from the sophists to contemporary rhetorical theorists.

25.206 Oral Interpretation of Literature (3) — Provides practice in skills necessary for conveying intellectual and emotional meanings in poetry and prose read to an audience. *Prerequisite: 25.103 or 25.104*

25.215 Communication Theory (Spring) (3) — Introduces definitions and models of communication as a social science; surveys methods for the scientific study of communication; describes recent developments in the theories of interpersonal, small group, public, and mass communication.

25.218 Discussion (3) — Presents a survey of and practice in types and patterns of public discussion. *Prerequisite: 25.103 or 25.104*

25.220 **Intercultural Communication (Spring) (3) — Provides an overview of speech communication as it relates to socio-cultural differences that reflect ethnic and racial experiences, knowledge, and values. *Prerequisite: 25.103 or 25.104*

25.307 Business and Professional Speech (3) — Studies business and professional communication, salesmanship (selling skills and methods), conference, and interviewing. *Prerequisite: 25.103 or 25.104*

25.315/25.421 Persuasion (Fall) (3) — Examines the way people use symbols to influence other people. Provides practice in presenting and evaluating persuasive messages. *Prerequisite: 25.103 or 25.104*

25.321 Argumentation (Spring) (3) — Examines basic principles of argument and evidence. Provides practice through presentation and refutation of arguments in debates on controversial issues. *Prerequisite: 25.103 or 25.104*

25.445 Organizational Communication (3) — Explores the theoretical and the practical aspects of how communication patterns develop in organizations. Open to undergraduate and graduate students.

25.470 Independent Study (1-3) — Provides for individual work and study in one of the areas of rhetoric and communication. Student finds a faculty sponsor, prepares a written proposal that requires departmental recommendation and the dean's approval, arranged through the chairperson. See section on Independent Study.

25.492/ 25.493/25.495 Special Topics in Communication (3) — Investigates significant aspects of speech communication. Topics vary by semester and include: Communication and Conflict, Family Communication, Communication Training in Organizations, Theories and

Techniques of Interviewing, Nonverbal Communication, Political Communication, Rhetoric in a Mediated Society, Cultural Foundations of the Information Society, and Media Criticism. *Consult the schedule booklet or the listed instructor for further information.* Prerequisite: 9 semester hours in speech communication courses

25.494 **Special Topics in Communication: Diversity Focus (3) — Investigates significant aspects of speech communication. Topics are approved as diversity courses and include Communication and the Sexes. *Consult the schedule booklet or the listed instructor for further information.*

tion. Prerequisite: 9 semester hours in speech communication courses

25.497 Internship in Communication (3-12) — Integrates classroom experience with practical work experience in industrial, business, or government work settings. Students must establish academic integrity of their proposed experience and its relevance to coursework in the major. Contact departmental internship coordinator to obtain detailed information and forms.

***Indicates course approved as diversity-focused*

Department of Communication Disorders and Special Education

Faculty

Carroll J. Redfern, Chairperson — B.S., Johnson C. Smith University; M.S., Bloomsburg State College; Ed.D., Lehigh University

G. Donald Miller, Assistant Chairperson, Professor — B.S., Indiana University of Pennsylvania.; M.A., Ph.D., Temple University

Dianne H. Angelo, Professor — B.S., M.Ed., Clarion University; M.S., Ph.D., University of Pittsburgh

Richard M. Angelo, Professor, Clinical Director — B.S., Mansfield State College; M.Ed., Bloomsburg State College; Ed.D., Lehigh University; Ph.D., University of Pittsburgh

Shaheen N. Awan, Associate Professor — B.A., University of Western Ontario; M.S., Clarion University of Pennsylvania; Ph.D., Kent State University

Ronald R. Champoux, Professor — B.A., Providence College; M.A.T., Assumption College; M.S., M.A., Ph.D., University of Michigan

Robert J. Lowe, Associate Professor — B.A., Slippery Rock University; M.Ed., Clarion University; Ph.D., Ohio University

Vishakha W. Rawool, Associate Professor — B.Sc., Bombay University; M.A., University of Texas at El Paso; Ph.D., Purdue University

Julia M. Weitz, Associate Professor — B.S., Emerson College; M.S., Ph.D., University of Pittsburgh

Degree Program

Bachelor of Science in Speech Pathology and Audiology

A total of 51 semester hours is required for a major in speech pathology and audiology.

Goals and Objectives

The preprofessional curriculum in communication disorders prepares students for admission to graduate education in speech pathology and audiology. The department makes no recommendation for any type of certification based on the completion of the undergraduate preprofessional curriculum. A core of required courses is prerequisite to graduate school admission and is based on the Ameri-

can Speech-Language-Hearing Association (ASLHA) accreditation/certification requirements.

Courses in the undergraduate preprofessional curriculum in speech pathology and audiology are open to all university students (majors and non-majors) who are interested in hearing science, speech science, normal language and communication development and/or disorders. Courses in the curriculum can be elected by students in teacher preparation (i.e., early childhood, elementary, secondary or special education or education of the hearing impaired) who want to gain competencies related to the special problems of teaching children with speech, language, and hearing impairments. The curriculum offers a general education course concerning the processes, functions, and pathologies of human communication.

The preprofessional curriculum provides the student with a broad general education background. The primary emphasis is on general education with a few introductory courses pertaining to the profession of speech pathology and audiology. No professional courses or experiences are offered at the undergraduate level (i.e., student teaching).

Admission to the graduate programs in audiology and speech pathology is competitive and limited. Graduates of the master's degree program in speech pathology and audiology are eligible for certification in speech correction granted by the Pennsylvania Department of Education, the Certificate of Clinical Competence in Audiology or Speech Pathology issued by the American Speech-Language-Hearing Association (ASLHA), and licensure in audiology or speech pathology issued by the Commonwealth of Pennsylvania.

Required Courses

The following courses in speech pathology and audiology are required: 72.162, 72.200, 72.220, 72.240, 72.300, 72.310, 72.320, 72.330, 72.340, 72.430, 72.450, and 72.460; plus the following courses which total 15 semester hours, Psychology 48.160, Biological and Allied Health Sciences 50.366, Physics 54.106,

and Special Education 70.101 and 70.202.

Elective Courses

A total of 23 semester hours in general elective courses must be selected with the approval of the adviser.

Speech Pathology and Audiology (Code 72)

72.152 Introduction to Communication Disorders (3) — Presents an introduction to the study of human communication and communication disorders, the role of professionals in communication disorders, basic processes, functions and problems of human communication for children and adults.

72.162 Introduction to Speech Pathology (3) — Presents an introduction to the neurophysiological bases of speech and language as fundamental to the understanding of pathologies of language and speech in depth. Explores research findings.

72.200 Introduction to Audiology (3) — Introduces the causes, evaluation techniques and rehabilitative procedures for various types of hearing problems; related auditory, speech, psychological, and educational factors; the roles of parent, educator, and specialist in the rehabilitation program. Presents hearing conservation procedures used in schools and industry.

72.220 Phonetics (3) — Studies of the physiological, acoustical, perceptual, and descriptive aspects of speech and sound production. Primary emphasis on description, classification, and transcription of speech sounds. Provides a base of knowledge for diagnosis and treatment of phonetic and phonological disorders of communication. *Prerequisite:* 72.162

72.240 Normal Language Acquisition (3) — Focuses on current information and theory regarding normal language acquisition. *Prerequisite:* 72.162

72.300 Auditory Training and Speech Reading (3) — Presents current teaching methods for educating children and adults with moderate and severe hearing losses. *Prerequisite:* 72.200

72.310 Speech Science (3) — Speech science is the study of the physiology of speech production, the acoustical characteristics of speech, and the processes by which listeners

perceive speech.

72.320 Assessment and Remediation of Language Disorders (3) — Prepares students for the clinical application of language analysis procedures drawn from linguistics, psycholinguistics, and sociolinguistics and to apply knowledge from these areas to the management of language disorders. Studies various intervention models. *Prerequisites:* 72.162, 72.220, 72.240

72.330 Assessment and Remediation of Speech Disorders (3) — Considers the major theoretical approaches to assessment and treatment of speech disorders. Students engage in clinical observation, examination of standardized tests, and procedures used in the differential diagnosis of disorders in the areas of articulation, phonology, fluency, and voice. Provides training in the administration of therapy programs. *Prerequisites:* 72.162, 72.220

72.340 Applied Behavioral Analysis for Speech and Language (3) — Applies the psychology of learning to communicative behavior and clinical problems. Presents current educational and therapeutic trends and practices.

72.430 Fundamentals of Audiology (3) — Presents a synopsis of primary concepts in diagnostic and rehabilitative audiology. Relates the possible implications of audiological topics to speech pathology, education of the hearing impaired, reading, nursing, and special education.

72.450 Clinical Observation (3) — Students develop the skills of a trained observer and participate in observations of the practice of audiology and speech-language pathology. Observations are conducted on and off campus.

72.460 Psycholinguistics (3) — Presents the study of language as a psychological phenomenon. Areas of study include language acquisition, meaning, biology of language, sociolinguistics, nonverbal communication, animal communication, and application of psycholinguistics to communication disorders. *Prerequisites:* 72.162, 72.240

72.468 Speech Habilitation in the Schools (3) — Examines the profession of speech/language pathology in a school setting as it interfaces with the other school-related disciplines. Emphasizes facilitation of communication among the disciplines.

72.480 Career Development in Speech-Language Pathology (3) — Enables pre-professional students to gain greater insight into the nature of speech and language disorders as they affect the individuals who have disorders of communication.

72.492/592 Workshop in Audiology and/or Speech Pathology (1-6) — Focus on contemporary trends, topics and problems in the fields of audiology or speech pathology. Guest lecturers, resource speakers, team teaching, field experience and practicum, new media and technologies and related techniques and methodologies are included.

72.493/593 Workshop in Audiology and/or

Speech Pathology (1-6) — Focus on contemporary trends, topics and problems in the fields of audiology or speech pathology. Guest lecturers, resource speakers, team teaching, field experience and practicum, new media and technologies and related techniques and methodologies are included.

72.494/594 Workshop in Audiology and/or Speech Pathology (1-6) — Focus on contemporary trends, topics and problems in the fields of audiology or speech pathology. Guest lecturers, resource speakers, team teaching, field experience and practicum, new media and technologies and related techniques and methodologies are included.

Department of Communication Disorders and Special Education

Faculty

Carroll J. Redfern, Chairperson — B.S., Johnson E. Smith University; M.S., Bloomsburg State College; Ed.D., Lehigh University

Arthur G. Dignan,, Assistant Professor, Curriculum Coordinator, Interpreting — B.A., Gallandet University; M.A., California State University at Northridge; M.Ed., East Central University

Judith M. Hirshfeld, Assistant Professor — B.S., M.A., Temple University; C.A.G.S., Boston University

Gerald W. Powers, Professor — B.A., University of Massachusetts; M.Ed., University of New Hampshire; Ed.D., University of Northern Colorado

Samuel B. Slike, Professor, Curriculum Coordinator, Education of the Deaf/Hard of Hearing — B.S., The Pennsylvania State University; M.S., University of Scranton; D.Ed., The Pennsylvania State University

Interpreting and Sign Language

Degree Program

Bachelor of Science in Interpreting

A total of 54 semester hours is required for a major in interpreting.

Goals and Objectives

This program provides specialized training for individuals seeking to become American Sign Language interpreters. The objective for the sign language interpreting curriculum is to prepare individuals for certification from the Registry of Interpreters of the Deaf as professional interpreters between deaf/hard of hearing and hearing consumers within the context of a variety of settings: legal, educational, social, or business. Individuals desiring to specialize in communication with the deaf have two options: a program leading to a bachelor of science in interpreting or a minor in sign language. Individuals seeking entrance to the program must complete the following courses prior to formal admission to the program: 74.154 American Sign Language I and 74.155 American Sign Language II.

Required Courses

Courses required for the major in interpreting include: 18 semester hours in American Sign Language training requirements – 74.153, 74.154, 74.155, 74.254, 74.255, 74.256; 36 semester hours in interpreting requirements – Speech Pathology and Audiology 72.152 and 72.200, 74.201, 74.301, 74.302, 74.303, 74.304, 74.401, 74.415; Communication Studies 25.103, 25.220, and 25.215, plus one additional course from the Code 25 course listing.

Elective Courses

Elective courses are to be chosen with the approval of an adviser and as required to meet the university's graduation requirement of 128 semester hours. Students may choose from the following free electives: English 20.111, 20.411; Theater Arts 26.112; Philosophy 28.207, 28.220, 28.290; Sociology 45.211, 45.213, 45.231; Anthropology 46.101, 46.200, 46.440; Psychology 48.101, 48.160, 48.211, 48.321; Special Education 70.101; Speech Pathology; Audiology 72.460; Interpreting 74.260.

Minor in Sign Language

Students from any academic discipline may declare a minor in sign language. The minor consists of 18 semester hours and requires the following courses: 74.153, 74.154, 74.155, 74.254, 74.255, and 74.256.

Area of Concentration in Education of Deaf/Hard of Hearing

The undergraduate curriculum in education of the deaf/hard of hearing lays the foundation for the training and education needed to prepare classroom teachers and itinerant hearing therapists to work in educational settings with deaf/hard of hearing children and adults. Individuals seeking certification to teach in educational programs for the deaf/hard of hearing are first required to major in early childhood, elementary, secondary or special education or speech pathology/audiology. Students supplement the curriculum for their majors with an area of concentration in education of the deaf/hard of hearing that requires a minimum of 18 semester hours. All students in studies in hearing loss take Gener-

al Education courses, professional education courses, and courses in studies in hearing loss concurrently throughout the program with the concentration in education of the deaf/hard of hearing.

Certification to teach deaf/hard of hearing students in school programs is granted by the Pennsylvania Department of Education upon completion of a related graduate program. Admission to the master's program in this field at Bloomsburg University is very competitive.

All applicants to the graduate program in Education of the Deaf/Hard of Hearing must have completed the following courses. *Students without an education background will need to take five education courses agreed upon by the curriculum coordinator in education of the deaf/hard of hearing.* The suggested time sequence is indicated below by an asterisk (*).

Required Courses

The following is a suggested time sequence for courses required in this program of study.

Freshman Year

72.152 Introduction to Communication Disorders

74.201 History, Education, and Guidance of the Deaf/Hard of Hearing

74.153 Introduction to Sign Language

Sophomore Year

72.200 Introduction to Audiology

74.154 American Sign Language I

Junior Year

A statistics course

74.305 Introduction to Instructional Methods for the Deaf/Hard of Hearing

74.380 Phonetics

Senior Year

72.450 Clinical Observation

Elective Courses

A total of 12 semester hours is taken in elective courses. Courses include: 74.155, 74.254, 74.255, and 74.256.

Studies in Hearing Loss

(Code 74)

74.153 Introduction to Sign Language (3) —

A study of sign language vocabulary and fingerspelling techniques used in communication with members of the deaf community. Emphasizes developing expressive and receptive skills.

74.154 American Sign Language I (3) —

A study of American Sign Language (ASL) including the history of ASL and its recognition

as a language. Focuses on development of expressive and receptive conversational ASL skills. *Prerequisite: 74.153 or equivalent skills*

74.155 American Sign Language II (3) — A continuation of ASL I with emphasis placed on more complex grammatical structures and conversational fluency. *Prerequisite: 74.154*

74.201 History, Education, and Guidance of the Deaf/Hard of Hearing (3) — Explores hearing loss with emphasis on the history of educational procedures and guidance in communicative, psychological, and vocational habilitation.

74.305 Introduction to Instructional Methods for the Deaf/Hard of Hearing (3) — Introduces the design of instructional procedures and methods of implementing curricula for education of the deaf/hard of hearing. Discusses and demonstrates traditional and innovative approaches to teaching.

74.380 Phonetics (3) — Studies of the physiological, acoustical, perceptual, and descriptive aspects of speech and sound production. Primary emphasis on the description, classification, and transcription of speech sounds. Provides a base of knowledge for the diagnosis and treatment of phonemic and phonological disorders of communication. *Prerequisites: 74.152, 74.201, 72.200, Junior or Senior standing*

74.254 The Deaf Culture (3) — Involves study and analysis of the deaf community. Emphasis on research and discussion of social, psychological, and personal aspects of the members of the deaf community.

74.255 American Sign Language III (3) — Continuation of ASL II. Major focus on the study of ASL sign principles and linguistic structure of the language to continue building expressive and receptive ASL skills. *Prerequisite: 74.155 or equivalent skills*

74.256 American Sign Language IV (3) — A continuation of ASL II. Focuses on more advanced linguistic aspects of ASL and a synthesis of all concepts previously learned. *Prerequisite: 74.255 or equivalent*

74.260 Interpreting in the Educational Setting (3) — Study of interpreting within a variety of educational settings including postsecondary, secondary, and elementary areas. Topical areas include: recent legislation on the status of interpreters, characteristics of various meetings, and visually coded English Sign Systems.

74.301 Introduction to Interpreting for the

Deaf (3) — Focuses on topics such as the Registry of Interpreters for the Deaf, various kinds of certification, establishing the interpreting situation, and the mental processes involved in interpreting and transliteration. Emphasis on ethical behavior. *Prerequisite: Completion of American Sign Language curriculum*

74.302 Interpreting English to American Sign Language (3) — Focuses on building expressive interpreting skills. Experience gained through laboratory work and classroom discussions when interpreting situations for observation and practice are presented. Emphasizes professionalism, principles, and ethics.

74.303 Transliterating English to Sign Language (3) — Focuses on building transliteration skills. Experience gained through laboratory work and classroom discussions when transliteration situations for observation and practice are presented. Emphasizes professionalism, principles, and ethics. *Prerequisite: 74.301*

74.304 Oral Interpreting/Transliterating (3) — Identifies information and techniques and the utilization of skills required for effective oral interpreting and transliterating. Includes use of personal characteristics to facilitate speech reading and the identification of the needs of the hearing impaired individual during interpretation. *Prerequisites: 74.152, and 74.301*

74.390 Directed Project in Communication Disorders (3) — Gives students the opportunity to carry out special in-residence or field projects in professional service programs under the direction of the faculty or designated practitioners. A detailed project plan must be submitted for faculty approval prior to registration.

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74.400 Communication Disorders Workshop (3) — Specialized study of communicatively handicapped persons, new technology in the field of communication disorders.

74.401 Sign to Voice Interpreting (3) — Emphasis on classroom discussion and laboratory work developing skills of comprehending the signed message, forming syntactically and contextually correct English interpretations, and the proper use of the voice.

74.415 Practicum in Interpreting (3) — Involves the placement of the student in interpreting situations on and off campus to gain "on-the-job" experience. Requires a minimum of 120 interpreting hours.

74.462 Problems in Education of the Deaf/Hard of Hearing (3) — Addresses the educational problem of hearing loss and the function of teachers in public and private educational settings.

74.469 Experience in Education of the Deaf/Hard of Hearing (1-3) — Provides experience working under supervision with deaf and hard of hearing children in a demonstration classroom or field facility. *Prerequisite: Consent of the instructor*

74.480 Independent Study and Research (1-3) — Permits students to work under faculty guidance when particular needs cannot be met by regularly scheduled courses. Learning experiences may include library research or creative academic projects. Nature and scope of the project determine semester hours awarded.

Department of Communication Studies

Faculty

Mary Kenny Badami, Chairperson, Professor — B.S., Fordham University School of Education; M.A., Hunter College; Ph.D., Northwestern University

Karen Anselm, Costume Designer, Assistant Professor — B.A., University of Pittsburgh; M.F.A., Carnegie Mellon University

Bruce Candlish, Scenographer, Assistant Professor — B.A., San Jose State University; M.F.A., The Pennsylvania State University

Michael Collins, Director of Theater, Assistant Professor — B.A., Northeast Missouri State University; M.F.A. Purdue University

Degree Program

Bachelor of Arts in Theater Arts

A total of 42 semester hours is required for a major in theater arts.

Bachelor of Science in Education

See the section on Secondary Education for detailed information on this degree program and the Communication Certification which offers an option in theater.

Goals and Objectives

The division of theater arts is committed to providing a strong undergraduate program for its majors and minors in the study and practice of theater, to supporting the university's general education curriculum, and to enhancing the cultural life of the campus community. All courses are taught by professionals in the field. Students in the major are expected to demonstrate a working knowledge of historical and contemporary theories and practices in dramatic literature, design, and performance. A degree in theater arts provides successful students with a solid background for achievement in graduate studies and career possibilities as performers, artists, managers, and technicians in professional theater and related fields such as film and television.

Required Courses

A total of 27 semester hours in required courses must be taken by theater arts majors. Required courses include: 26.102, 26.108 (must be taken for a total of 6 semesters),

26.112 or 26.316, 26.211 or 26.345, 26.215, 26.321, 26.341, 26.416, and 26.490 (a seminar in script analysis).

When students acquire junior standing, they must declare an emphasis area. Requirements for emphasis areas are:

Performance — 15 semester hours: 26.112 or 26.316 (choose the course not previously taken from the required course listing), 26.200, 26.451, 26.490 (a seminar in stage make-up and a seminar in advanced scene study).

Design Technology — 15 semester hours: 26.211 or 26.345 (choose the course not previously taken from the required course listing), 26.251, 26.311, 26.414, 26.490 (a seminar in technical problems).

General — 15 semester hours: 26.112 or 26.316 (choose the course not previously taken from the required course listing), 26.211 or 26.345 (choose the course not previously taken from the required course listing), 26.219, and one course each selected from the Performance and Design Technology emphasis areas.

General Education Courses

Recommended General Education courses include: 30.101 and 35.101.

The Bloomsburg Players

The Bloomsburg Players is the theater division's cocurricular producing and support organization. Membership includes majors and minors: students with professional ambition as well as those who share a love of the art and process as an avocation.

Theater Arts (Code 26)

26.102/ 26.208 Introduction to Theater Arts (3) — Presents a survey of the literature, production, and criticism of the theater. Required for theater majors.

26.108 Theater Practicum (0-1) — Participation in plays: acting or technical work. Grade awarded each semester. *Participation for two semesters for 1 semester hour of credit. May be repeated for maximum of 3 semester hours.*

26.112 Fundamentals of Acting (3) — Introduces the theories and techniques of acting.

Provides for individual and group exercises.

26.200 Experimental Movement (3) — Exercises and methods explored to support the vocal and physical demands of performance for the stage.

26.209 Theater Appreciation (3) — Presents a survey of all aspects of theater: acting, criticism, design, directing, history, and production.

26.211 Theater Production/Stagecraft (3) — Studies basic stagecraft: scene construction, painting, drafting, and crewing of a show. Laboratory work required.

26.215 History of the Theater (Spring) (3) — Surveys structures, production practices, plays and the theater's function in societies from ritual beginnings through the 19th century.

26.219/26.319 Children's Theater (3) — A survey of history, theory, and production of theater for young audiences.

26.251/26.314 Theory of Stage Lighting and Design (3) — Provides for intensive study of theory and design of lighting of a production supplemented by applied work on productions. Laboratory hours required.

26.311 Stage Design (3) — An introduction to basic movements and the methods, approaches, tools, materials, and visual concepts of scene design.

26.316 Play Directing (3) — An overview of the principles and techniques of directing and the collaborative process with an introduction to script analysis needed for concept development. *Prerequisite: One course in theater*

26.321 Theater and Stage Management (3) — Prepares students for professionalism in production of plays and the management of a the-

ater company.

26.340 Scriptwriting (3) — Studies dramatic structure, types, and styles of drama. Students are required to write scripts for stage, film, radio, or television. *Prerequisite: One writing course or consent of the instructor*

26.341 Fundamentals of Theater Design (3) — An introduction to the elements of designing scenery, costumes, and lighting as they relate to the components of a theatrical production.

26.345 Costume Construction (3) — Basic techniques and approaches to costume construction for the stage.

26.414 Costuming for the Stage (3) — The study and application of costume design for the theater including methods, tools, materials, and visual concepts.

26.416 Modern Theater (3) — Continues the study of theater history from 19th century through the theater of today. *Prerequisite: 26.215 or consent of instructor*

26.451 Advanced Acting (3) — Character analysis based on scriptwork. Students begin to focus on particular areas of development.

26.470 Independent Study (1-3) — Provides for individual work and study in one of the areas of theater. Student finds faculty sponsor and prepares a written proposal, which requires departmental recommendation and dean's approval, arranged through the chairperson. See section on Independent Study.

26.490 Seminar: Theater (3) — Provides for a concentrated study of an individual artist, a period or a movement in theater. Offered on demand. *Prerequisite: 9 semester hours in theater or consent of the instructor*

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Brad MacDonald, M.L.S., M.S.Ed.

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Center for Counseling and Human Development

Kambon Camara, M.S., assistant professor
Dolly Diers, M.A., assistant professor
Barry L. Jackson, Ph.D., professor
Venus Hewing, M.Ed., assistant professor and chairperson

Shell E. Lundahl, assistant professor, M.A., M.Ed.

Director, Curriculum Materials Center

Paul Quick Sr., M.S., assistant professor

Coordinator, Tutorial/504 Services

Peter B. Walters, M.A., instructor

Director, Upward Bound

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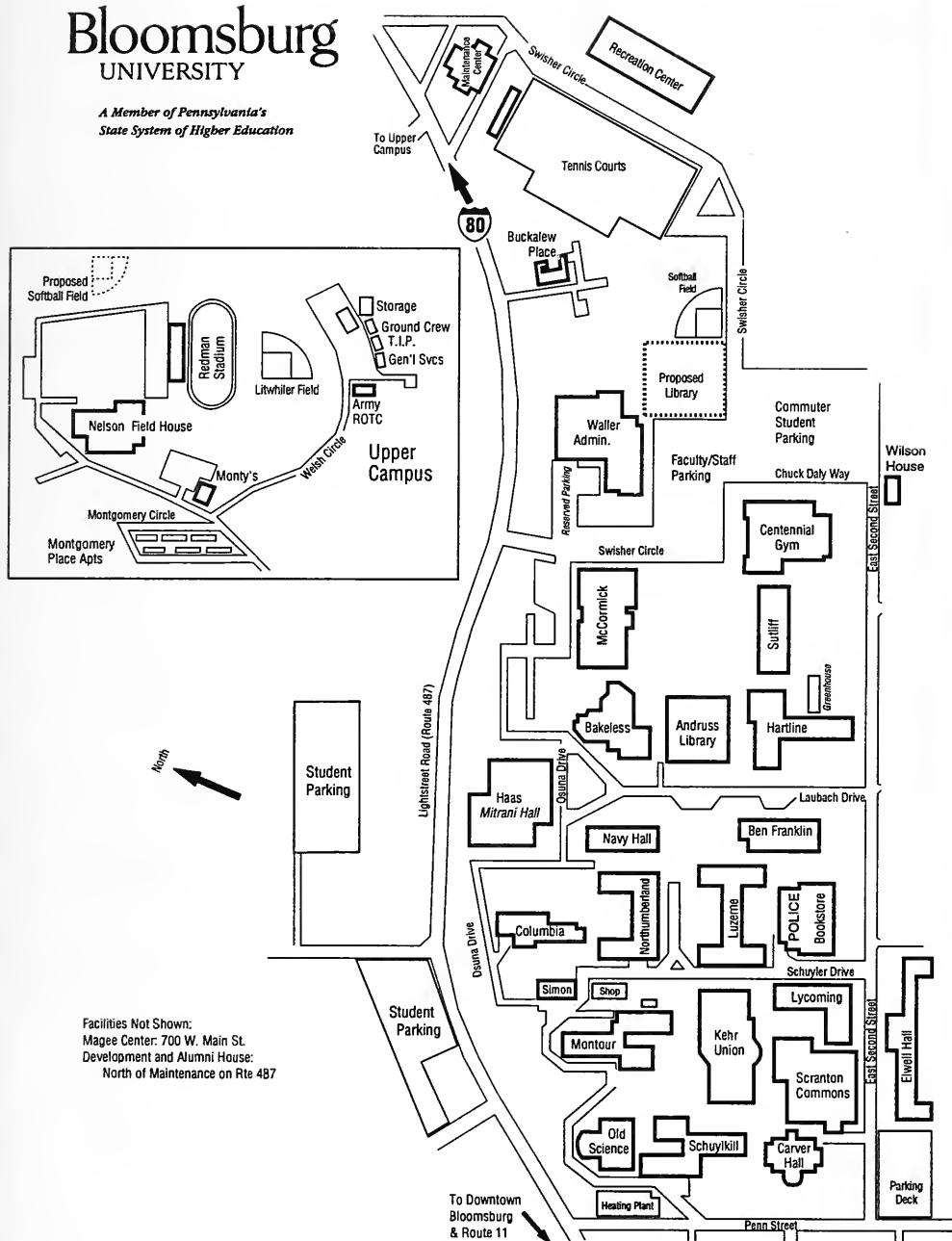
W. Jan. Beard, M.S., instructor

Department Locations:

Accounting — Sutliff
Allied Health — Hartline
Anthropology — Old Science
Art — Old Science Hall
Biology — Hartline
Business Administration — Sutliff
Business Ed — Sutliff
Chemistry — Hartline
Computer & Inf. Science — Sutliff
Earth Science/Geology — Hartline
Economics — Bakeless
Education — McCormick
Engineering — Hartline
English — Bakeless
Finance — Sutliff
Geography — Hartline
Health/Phys Ed/Athletics — Nelson
Health Sciences — McCormick
History — Old Science
Interdisciplinary Studies — Waller
Languages/Cultures — Old Science
Management — Sutliff
Mgmt. Information Systems — Sutliff
Marketing — Sutliff
Mass Communications — McCormick
Mathematics — McCormick
Medical Technology — Hartline
Military Science — ROTC (Upper Campus)
Music — Haas
Nursing — McCormick
Office Admin — Sutliff
Philosophy — Bakeless
Physics/Health Physics — Hartline
Political Science — Bakeless
Psychology — McCormick
Radiological Technology — Hartline
Social Welfare — McCormick
Sociology/Criminal Justice — McCormick
Special Education — Navy
Speech Communication — Navy
Speech Pathology/Audiology — Navy
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Theater Arts — Haas

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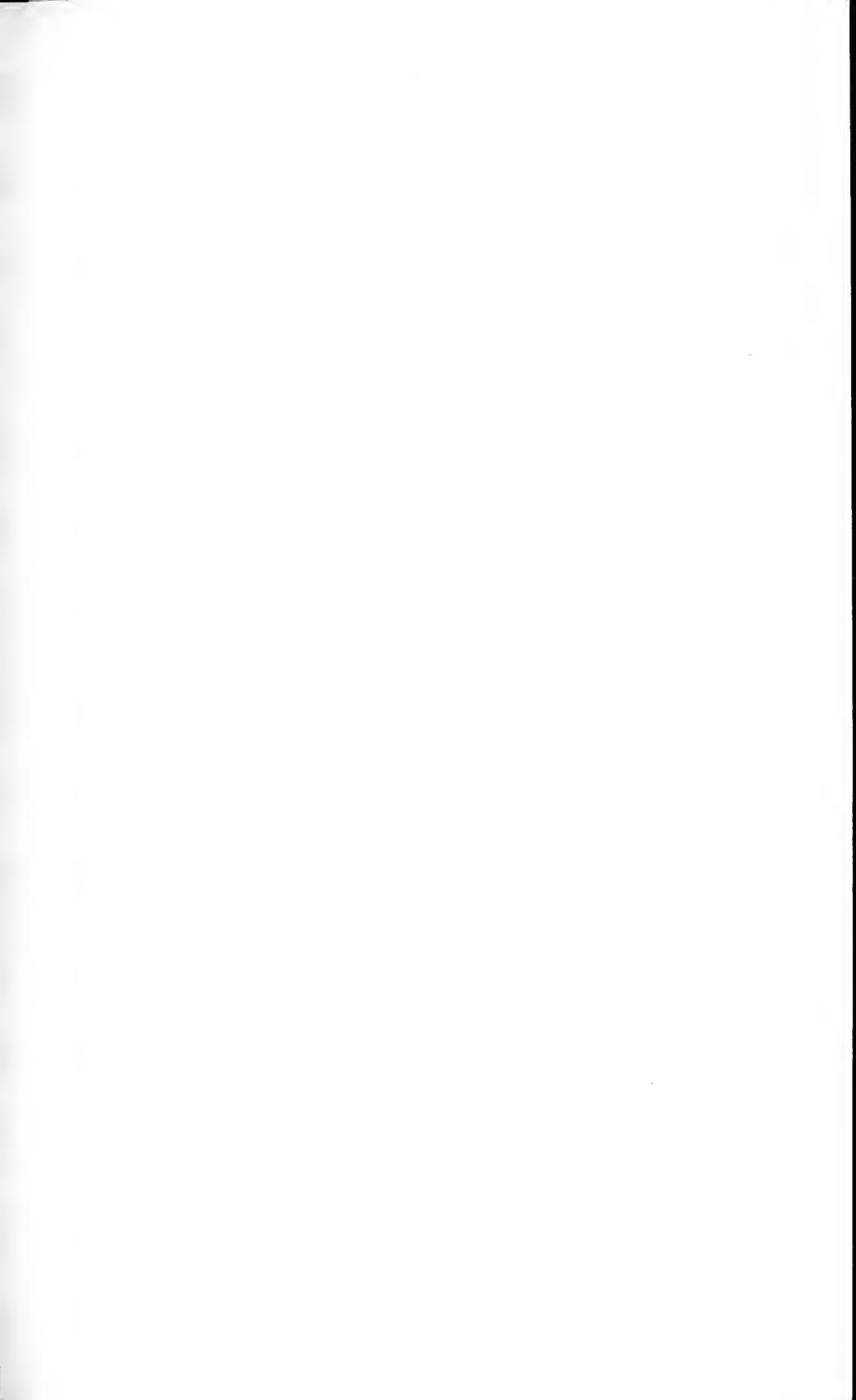
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